

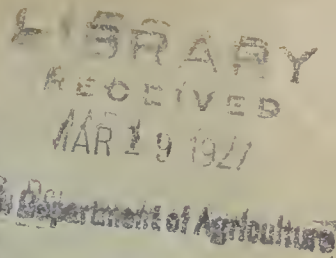
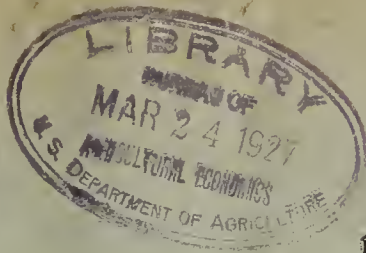
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THE AMERICAN

ELEVATOR AND

GRAIN TRADE



Printed in U. S. A. Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879. Established 1888

PUBLISHED BY Mitchell Brothers Publishing Co. } A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS. } One Dollar Per Annum SINGLE COPIES, 15 CENTS

VOL. XLV

431 South Dearborn Street, Chicago, Ill., March 15, 1927

NO. 9

Of Course

We want your business but we want it on a basis that will pay you as well as ourselves. We want it because we have proper facilities for handling it.

Don't be satisfied with slow returns or poor service; send your shipments to

McKenna & Strasser

GRAIN

60 Board of Trade
CHICAGO

GRAIN DRIERS
FEED MIXERS
FEEDERS
STEAM COILS
COOKERS
MOLASSES HEATERS
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WILLEY ELLIS COMPANY

Successors to
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Dried Buttermilk

100 lb. Paper Lined Sacks

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**Cod Liver Oil
and Meal**

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FEED PLANT EQUIPMENT

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S. T. EDWARDS & CO.

110 S. Dearborn St. Chicago, Ill.

WHY-A-LEAK —STOP IT—

BAD ORDER CARS

cause the loss of many hard earned dollars to shippers of grain and seed. MUCH OF THIS LOSS can be saved by the use of Kennedy Car Liners. These car liners practically condition a bad order car and enable shippers to load cars that otherwise would be rejected.

KENNEDY SYSTEM of car liners prevents leakage in transit and are made for all cases of bad order cars, consisting of full Standard Liners, End Liners and Door Liners.

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**THE KENNEDY CAR LINER &
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Caldwell Products

Power Transmission Machinery
—Bearings, Shafting, Pulleys,
Machine Molded Gears, Cut
Gears, Chains and Wheels

**Designed and Built for Dependable Service.
To Handle All Kinds of Materials Economically.
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SCOOP TRUCK

CAPACITY { 200 Lbs. Coal
2½ Bushels Grain



Can easily add Twenty-Five cents an Hour to the value of a man's time who uses it in unloading Coal or Grain from box cars.

Hence, in two weeks' use the Scoop-Truck will pay for itself and cost you nothing for its use thereafter. It will last for years and save the wearing out of a dozen common scoops in doing a like amount of work. Hundreds have tried it and will certify to the truth of these statements. Why not order now and let the Scoop-Truck be giving itself to you?

Patented July 30, 1907

PRICE: \$15.00 F. O. B. cars at factory

Detroit Scoop Truck Co., 993 Osborne Place, Detroit, Mich.

THE MANHATTAN RUBBER MFG. COMPANY

Executive Offices and Factories
Passaic, New Jersey

Manufacturers of Mechanical Rubber Goods of all kinds.
Specialists on Conveyor and Elevator Belting

Branches in leading cities of the United States

More Bushels Handled - More Years of Service

THE manufacturer of real vision seeks continually to improve his product, without increasing its cost.

A notable advance in this direction has recently been accomplished with Diamond Rubber Belts, both Transmission and Conveyor. We are now able to offer to the American Grain Industry belts of greatly improved construction, at prices no higher than before.

This means to the user of Diamond Belts more bushels handled, greater horsepower delivered — longer, more economical service for each dollar spent.

Let us quote NOW on any belts you contemplate buying within the next six months.

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Akron, Ohio

Atlanta	Boston	Kansas City	New York	Philadelphia
Chicago	Dallas	Los Angeles	Seattle	San Francisco

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Rubber Belting ♦ Hose · Packing

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Tennessee

The *Natural* Market for Southeast-Bound Grain

Deal Directly with Nashville's Leading Grain Firms

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Corn Specialists and Manufacturers of

Moon-Beam Poultry Feeds

Tennessee Grain Company

And

Tennessee Milling Company

Receivers and Shippers of Grain

Manufacturers of Soft Wheat Flour

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Poultry Feeds,
Remedies, and
"Vigoro"
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400 Baths

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Illinois Grain Dealers Assn.
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By W. A. HENRY and F. B. MORRISON
of the Dept. of Agriculture, University of Wisconsin

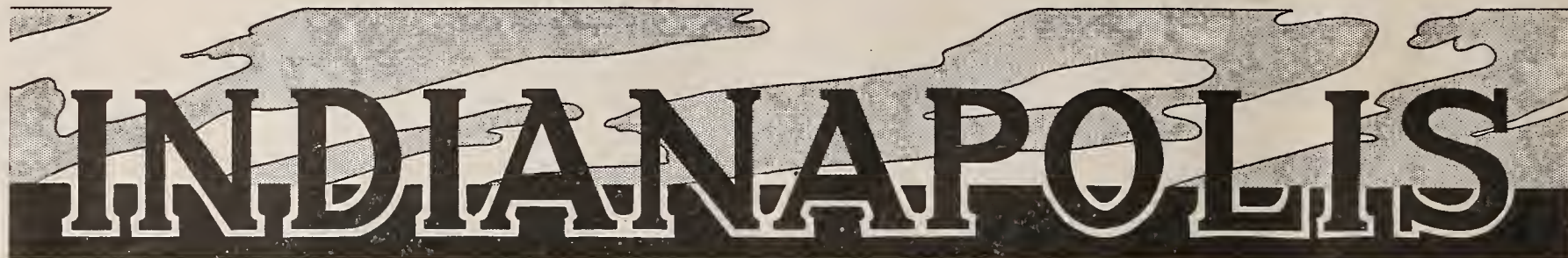
An invaluable book of reference which every feed manufacturer and dealer should have to solve his own and the farmer's problems.

Contains formulas of feeds for many purposes and instructions for making scientific rations from any combination of ingredients at hand.

770 pages — \$4.00

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INDIANAPOLIS

Indianapolis—Your Market—A Three Times Greater Grain Market

Indianapolis, the center of grain centers, is known today as one of the most important, rapidly growing grain and hay markets in the country. Receipts of grain during the last ten years have nearly trebled in volume, due to the advantages its geographical location offers to the grain and hay producing and consuming sections of the country, its splendid railroad facilities assuring prompt returns on shipments, its large local consumption of grain by its corn and flour mills and its manufacturing industries, its increased elevator storage and drying equipment, its adequate weighing facilities and efficient inspection department. This has made Indianapolis more and more important each season for shippers and buyers of grain, hay and feed.

Movement of Grain During the Year 1926

	Receipts	Shipments
Corn	16,736,000 bushels	12,082,000 bushels
Oats	8,558,000 bushels	7,956,000 bushels
Wheat	5,405,000 bushels	2,627,000 bushels

The following Receivers and Shippers are members of
Indianapolis Board of Trade

HAYWARD-RICH GRAIN COMPANY

COMMISSION AND BROKERAGE
414-415 Board of Trade Building

WM. R. EVANS, President GEO. H. EVANS, Sec.-Treas.

Midwest Elevator Company

Incorporated
BOARD OF TRADE

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SERVICE—EFFICIENCY—COURTESY
SHIP TO

HART-MAIBUCHER CO.

Consignments and Sales to Arrive

THE CLEVELAND GRAIN & MILLING CO.

OPERATING FOUR TERMINAL ELEVATORS
Mighty Good Consignment Service
Ed. K. Shepperd, Manager

WALLACE-GOOD CO.

Grain, Stocks, Cotton
Operating the James E. Bennett & Co. Wire
Room 118, Board of Trade Bldg.

H. E. Kinney Grain Co.

COMMISSION—BROKERAGE

THE LEW HILL GRAIN COMPANY

G R A I N
COMMISSION, BROKERAGE Phone Main 3886



The Bingham Grain Company

Receivers and Shippers of
G R A I N

WELLER

GRAIN HANDLING EQUIPMENT

WHITE'S GRAIN CAR DOOR OPENER



A few of the
Weller Products

Apron Conveyors
Belt Conveyors
Drag Conveyors
Mixing Conveyors
Spiral Conveyors
Bucket Elevators
Elevator Buckets
Elevator Boots
Elevator Casing
Elevator Heads
Barrel Elevators
Sack Elevators
Elevator Spouts
Loading Spouts
Dock Spouts
Truck Dumps
Wagon Dumps
Hoppers
Power Shovels
Car Pullers
Rope Drives
Pulleys
Hangers
Friction Clutches
Chain
Sprockets
Etc.



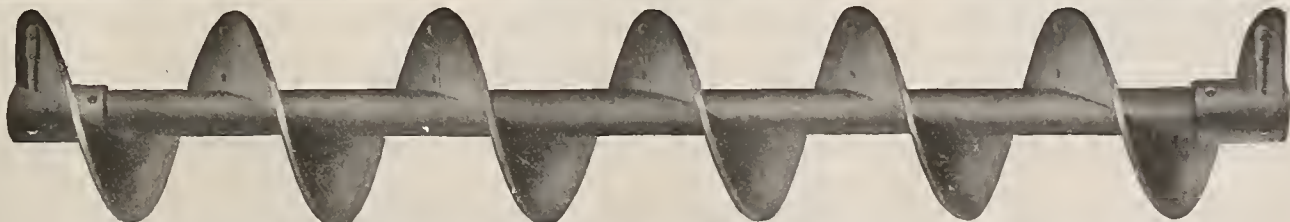
SAVES TIME—SAVES LUMBER

No complicated parts to get out of order

Strong and substantially constructed
Made entirely of forged steel
Will last a life time
Quickly and economically installed
Operated by one man
Under full control of the operator
Does not interfere when loading as it can be
swung out of the way and hooked to the wall

Comments from some of the users:
"We find that it is one of the best devices of
this kind we have ever tried."
"Your Car Door Opener is all that you claim
for it."
"The fact that we have ordered another is the
best indication of the satisfaction we got out of
the first one that we ordered and might add, are
still getting service we are highly satisfied with."

Send for Car Door Opener Circular

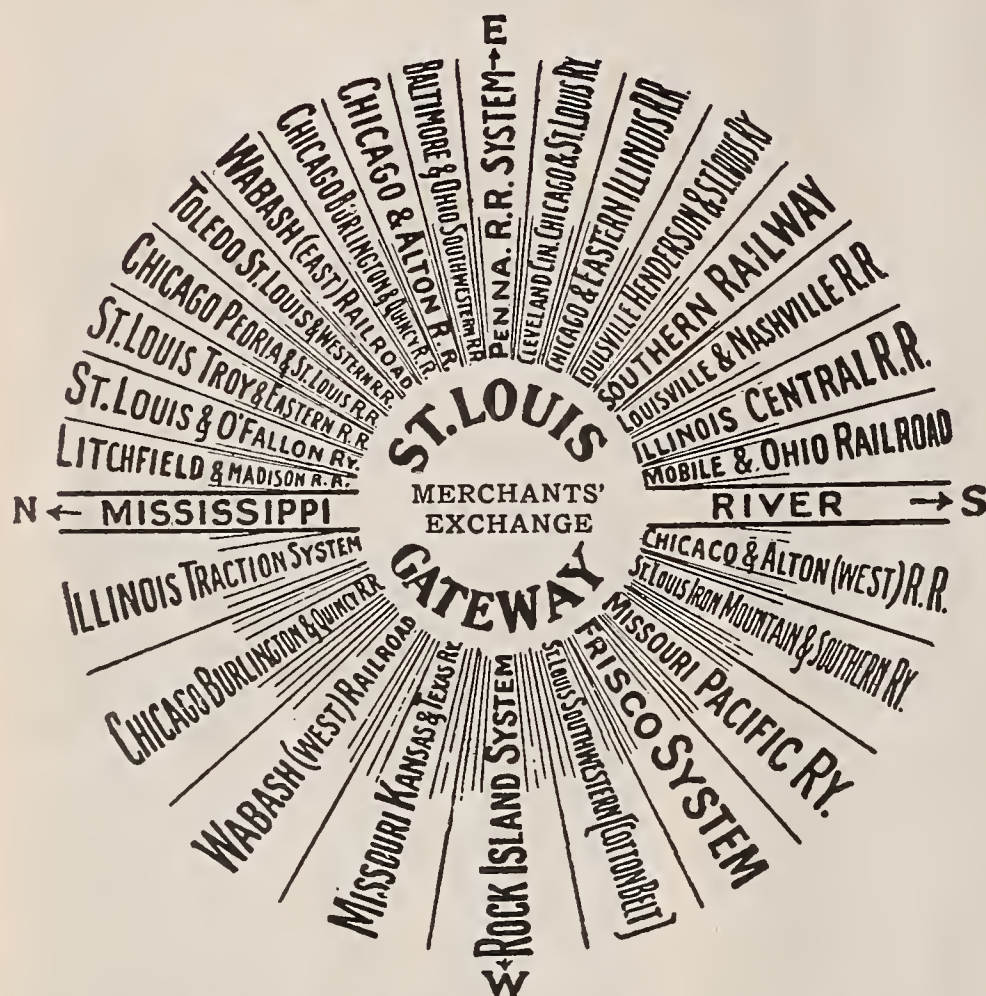


Weller Made Spiral Conveyors—Give the Service—Write for Prices

WELLER MFG. CO.

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ST. LOUIS, MO.



Within a radius of 25 Miles—Center of Corn Production.
Within a radius of 250 Miles—Center of Oat Production.
Within a radius of 135 Miles—Center of Farm Area.
Within a radius of 100 Miles—Center of Farm Valuation.
Within 175 Miles—Center of Population, United States.

St. Louis One of the Greatest
Primary Grain Markets in the
United States

More than One Hundred Million
Bushels of Grain Received
Annually

Movement of Grain by Barge
from St. Louis to New Orleans
for Export a Factor in Grain
Trade

*St. Louis Leading Consign-
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States*

Nanson Commission Co.

(INCORPORATED)
GRAIN AND HAY

Write Us for Full
Information on
St. Louis Markets

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Consignments a
Specialty

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GRAIN, HAY AND SEEDS

A long established house, energetic, enterprising and alert for your interests.

Let us handle your consignments

300 Merchants Exchange

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"THE CONSIGNMENT HOUSE OF ST. LOUIS"

GRAIN, HAY and GRASS SEEDS

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Chicago, Ill.

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HANDLED ON COMMISSION
BOUGHT TO ARRIVE
SOLD FOR SHIPMENT
EXPORT

ST. LOUIS

For Milling Wheat

Come to St. Louis

Best Grades of Soft Winter and Hard Red
Wheat always available. Millers for years
have found the St. Louis Market most satis-
factory for wheat supplies.

The Winter Wheat Market



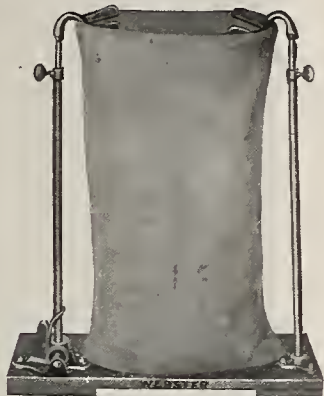
Buffalo Elevator Bucket



Steel Screw Conveyor



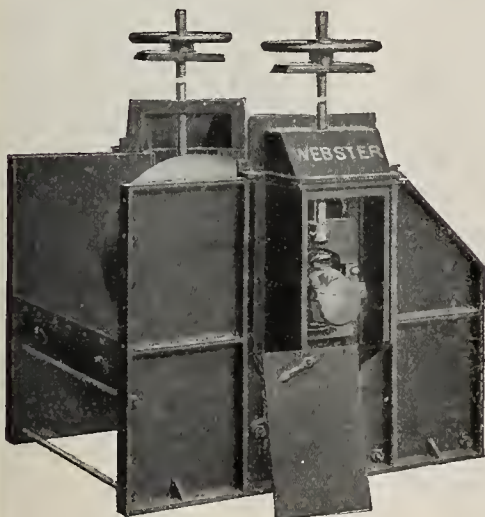
Empire Elevator Bucket



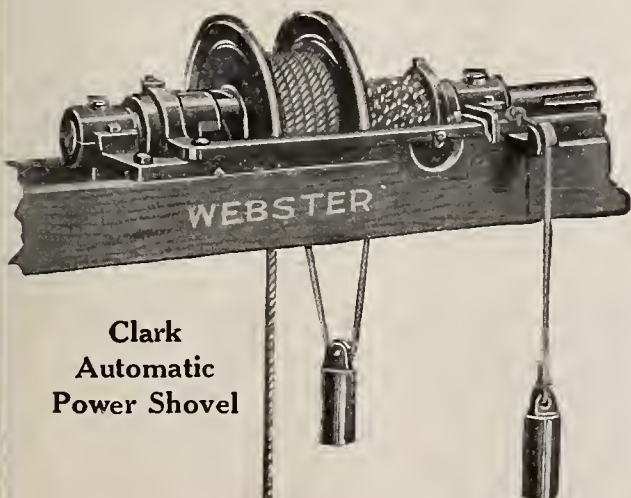
Mosher Bag Holder



Champion Flour Scoop



Elevator Boot



Clark Automatic Power Shovel



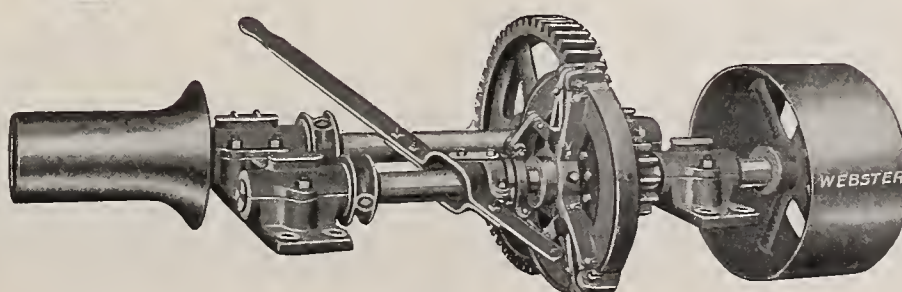
Sprocket Wheel



Hercules Grain Scoop



Salem Elevator Bucket



Car Puller



Minneapolis "V" Elevator Bucket

Webster Grain Handling Equipment

WHETHER your requirements are for elevator buckets, sprockets, chains, bearings, friction clutches, elevator boots, car pullers, grain scoops, power shovels, or complete equipment for handling grain, flour and feed, Webster offers you an opportunity to obtain the best.

Our forty-nine years' experience in designing and manufacturing grain handling equipment has enabled us to produce only that which is recognized as superior.

No matter what your grain handling problem is, Webster equipment, plus our engineering staff, will more than likely lead you out of your difficulties. Catalog showing our complete line of grain handling equipment sent on request.

THE WEBSTER MFG. COMPANY

1856 N. Kostner Ave.

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"Eureka" - "Invincible" Grain Cleaning Machinery



Single Machine

"EUREKA"
"INVINCIBLE"
GRAVITY
SEPARATOR
familiarly known as the
NEEDLE SCREEN

Ideal for separating slim grains and small seeds from fat kernels. In its descent, the grain tumbles over a series of vibrating needle screens. Seeds and thin, light, underweight kernels drop through the spaces between the needles. The larger, heavier, sound grain rides over the ends of the needles and comes out CLEAN.

Gravity and Vibrating Needles do the work

The vibrating needles prevent clogging or filling up of the screens.

Self-acting Requires no power No moving parts

A splendid machine for separating

Wild Oats, Immature Kernels, Seeds, etc.

from



Double Machine

Light Barley

Manufactured by

WORLD'S LARGEST PRODUCERS OF HIGH GRADE
GRAIN CLEANERS

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SILVER CREEK, N.Y.



"EUREKA" - "INVINCIBLE" GRAIN CLEANING MACHINERY

European Branch: 64 Mark Lane, London, E. C. 3, England



In America's Finest Feed Plants



Elevator and Feed Units, Anheuser-Busch Company, St. Louis, Mo.

With a background of 69 years of manufacturing experience, and an engineering counsel at its command which helped perfect the Busch-Sulzer Diesel engine, the Anheuser-Busch Company of St. Louis, Mo., adopted chain drives in its new feed plant, the majority of which are Morse Silent Chain Drives.

Morse Drives are 98.6% efficient, positive, flexible, ideal for short centers. One-tenth or 5,000 H.P., the same dependable results are possible.

Publication No. 28 illustrates and describes many applications of Morse Silent Chain Drives in prominent elevators. Address the nearest office for a copy.

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TORONTO, 2, ONT., CAN.....50 Front Street, E.
Strong Scott Mfg. Co.
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Strong Scott Mfg. Co.





FIRST NATIONAL BANK OF CHICAGO

Statement of Condition at Close of Business December 31, 1926

ASSETS		LIABILITIES	
Loans and Discounts	\$212,463,282.11	Capital Stock paid in.....	\$15,000,000.00
United States Bonds and U. S. Certificates	377,816.38	Surplus Fund.....	15,000,000.00
U. S. Bonds to Secure Postal Savings Deposits	780,000.00	Other Undivided Profits.....	4,419,765.81
Other Bonds and Securities (market value)	7,201,127.79	Discount Collected but not Earned....	1,050,551.81
Real Estate (Bank Building).....	4,549,339.93	Dividends Declared but Unpaid.....	824,136.50
Federal Reserve Bank Stock.....	900,000.00	Reserved for Taxes.....	3,108,651.41
Customers' Liability Account of Acceptances	4,744,446.45	Liability Account of Acceptances.....	6,109,438.87
CASH RESOURCES		Time Deposits	\$22,004,481.88
Due from Fed. Res. Bank \$25,071,671.46		Demand Deposits.....	236,280,720.32
Cash & Due from Banks 48,684,729.86	73,756,401.32	Liabilities other than those above stated	1,116,297.94
Other Assets	141,630.56	Contingent Liabilities	
		under Commercial and Travellers Letters of Credit Guaranteed by Customers	\$ 6,375,809.99
	\$304,914,044.54		\$304,914,044.54

FIRST TRUST AND SAVINGS BANK

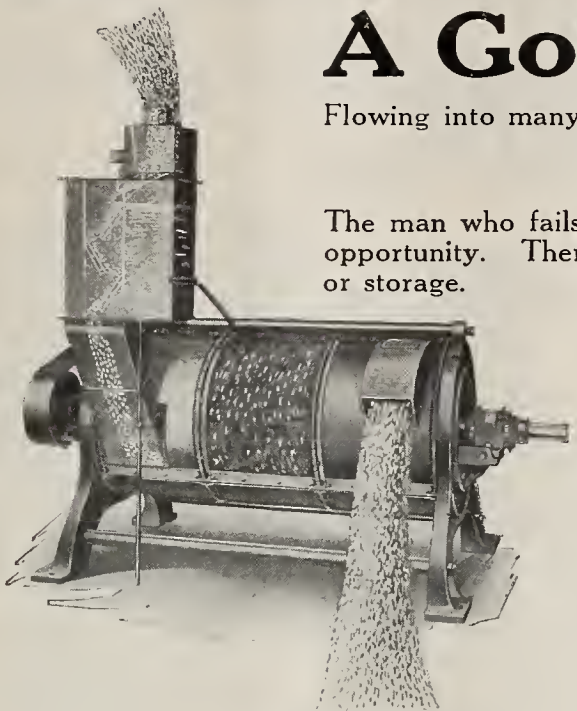
Statement of Condition at Close of Business December 31, 1926

ASSETS		LIABILITIES	
Bonds and Securities.....	\$48,926,728.27	Capital Stock	\$ 7,500,000.00
Time Loans and Discounts.....	45,425,565.39	Surplus Fund.....	7,500,000.00
Federal Reserve Bank Stock.....	450,000.00	Other Undivided Profits.....	3,994,972.21
Bank Premises (Equity).....	4,451,599.65	Reserved for Interest and Taxes.....	3,314,855.28
Demand Loans.....	\$31,602,236.79	Liability as Endorser on bills purchased and sold	3,866,390.42
Due from Fed. Res. Bank 5,168,743.10		Time Deposits	\$95,229,308.14
Cash & Due from Banks 12,104,832.34	48,875,812.23	Demand Deposits.....	25,798,741.12
Other Assets.....	288,054.51	Liabilities other than those above stated	1,213,492.88
	\$148,417,760.05		\$148,417,760.05

Combined Capital, Surplus and Profits \$ 53,414,738.02
 Combined Deposits 379,313,251.46
 Combined Resources 453,331,804.59

Frank O. Wetmore, Chairman
 Melvin A. Traylor, President

Dearborn, Monroe
 and Clark Streets

Smutty WheatClean Wheat**A Golden Stream of Profit!!**

Flowing into many mills and elevators is a stream of gold, propelled by a steady, reliable force.

Is it flowing your way?

The man who fails to take the profit that results from cleaning smutty wheat is overlooking a big opportunity. There is a sure, simple way to put smutty wheat into first class condition for milling or storage.

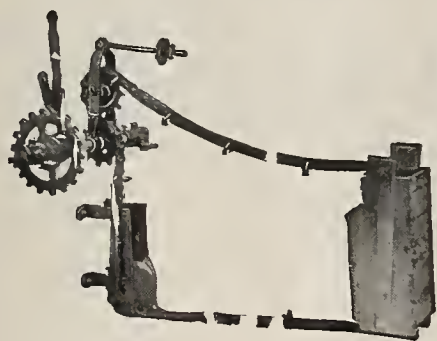
—WOLF-DAWSON—
WHEAT WASHER AND DRIER

The owner of an elevator that is equipped with a Wolf-Dawson can receive smutty wheat, wash it thoroughly at small expense, and pocket the dockage charge. This is being done every day in other elevators. You can do it in yours.

See for yourself what it does.

If you have not received one of our cartons, showing samples taken from a carload of smutty wheat before and after washing, there is one waiting for you. Write for it.

A Product of
The Wolf Company
64 Commerce St.
Chambersburg, Pa.

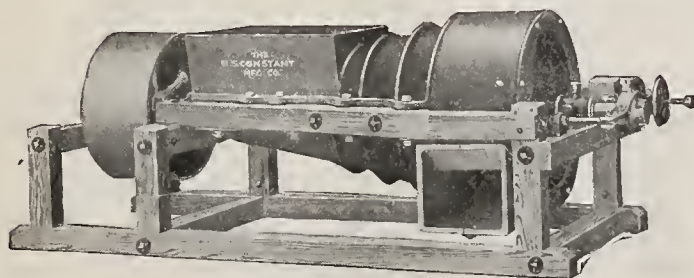


We build our chain feeders to deliver the capacity of U. S. sheller which is sufficient endorsement of durability and capability.

Get Your Grain in—and the Farmer Out—in a Hurry. The Cost Is No More.

Here is your combination for speed and insurance against the costly "Choke-up."

The U. S. Chain Conveyor and Feeder
The U. S. Pitless Corn Sheller
The U. S. "V" Type Elevator Bucket



The "V" bucket completes a U. S. Sheller installation by giving the increased elevating capacity required. Manufactured in all sizes with dies stamping the bucket at one operation from a single sheet of metal.

Priced accordingly

Statement by Owner

"The U. S. Sheller has devoured everything from cog wheels to 40 feet of drag chain and seems to like it. Leaves the cobs cleaner and in better size than other shellers we are operating."

**CONSTANT XXth CENTURY CORPORATION**

Manufacturers of Grain Elevator Equipment and XXth Century Flour Mills

BLOOMINGTON, ILL.

PUT THAT DIFFICULT JOB UP TO "EHRSAM"



FROM 1872—over 50 years ago, "Ehrsam" has been producing and improving Grain Handling and Milling Equipment of all kinds. And during these years many problems have been met and overcome by "Ehrsam" Engineers.

EHRSAM Grain Handling and Milling Equipment

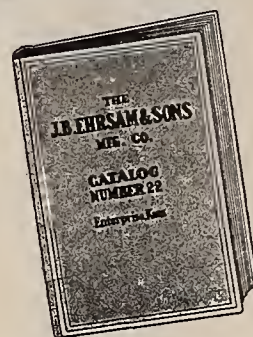
This long specialization and experience places us in an enviable position to give you just the right equipment for your particular needs. It is, therefore, wise econ-

omy to consult "Ehrsam" on all equipment matters. We ask that you write us today.

FREE CATALOG

**J. B. EHRSAM & SONS MFG. CO.
ENTERPRISE, KANSAS**

Manufacturers of Machinery for Flour Mills; Grain Elevators; Cement Plaster Mills; Salt Plants; Coal Handling and Rock Crushing Systems; Fertilizer Factories; Power Transmission, Elevating and Conveying Equipment

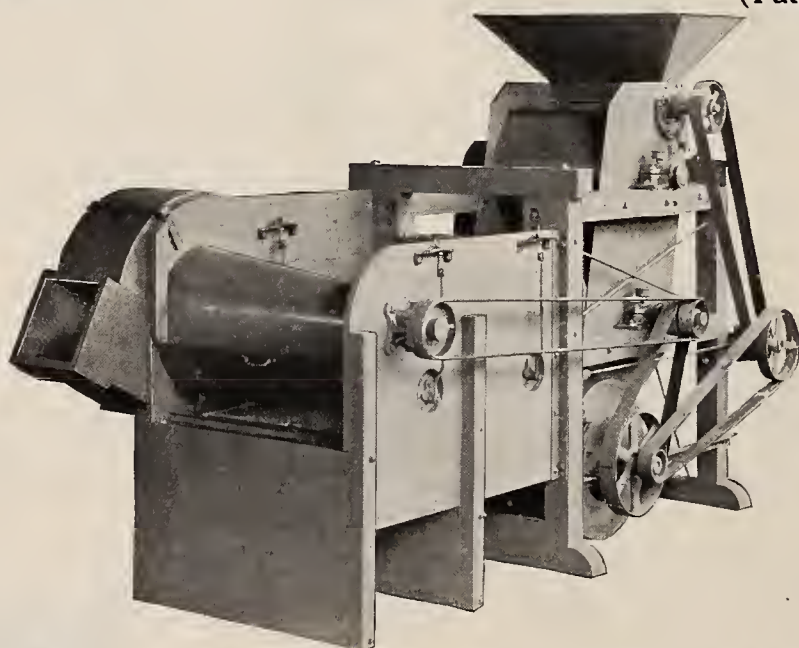


The Big 400-page "Ehrsam" Catalog will be sent to anyone interested upon request.

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THE STANLEY OAT HULLER

(Patent Pending)



A Profit Maker
for
Mills and Elevators

Produces Oat Groats Suitable
for Animal and Chicken Feeds.

HULLS OATS THOROUGHLY—SEPARATES KERNELS FROM HULLS
EFFICIENT LARGE CAPACITY SMALL POWER

Full particulars and samples upon request
— WRITE NOW —

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MOLINE, ILLINOIS, U. S. A.

Sole Manufacturers

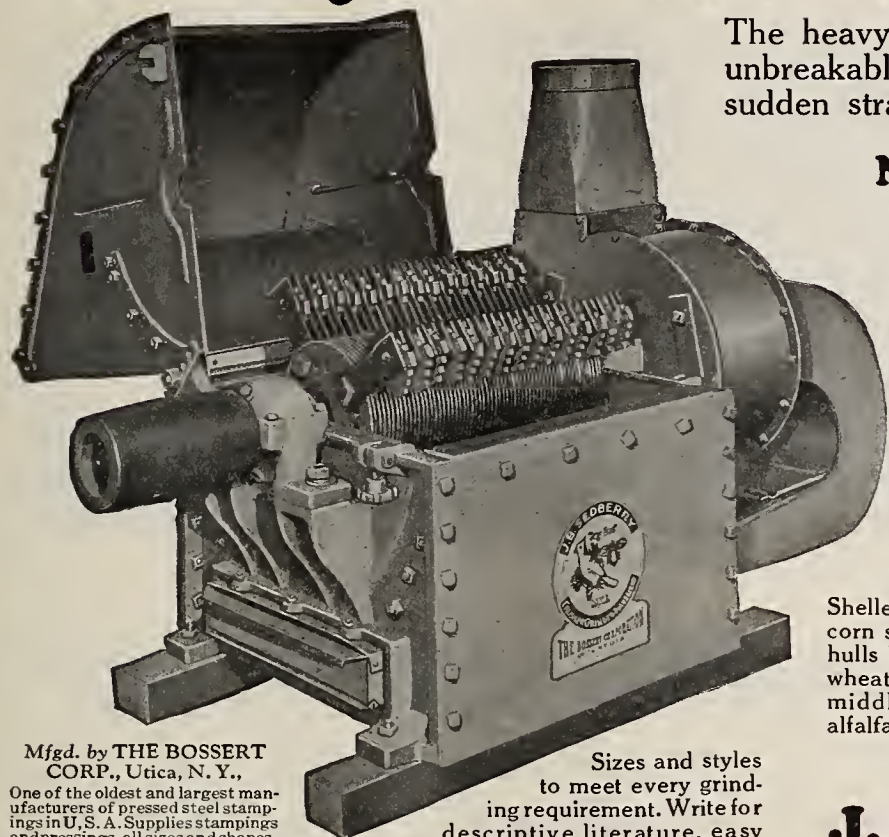
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Southwestern Representative
S. H. STOLTZFUS

2021-2023 Pennsylvania Ave., Kansas City, Mo.

Finest Grinding—Biggest Capacity Lowest Operating Cost—Longest Life

The "Jay Bee" Will Outlast Any Feed Mill Made



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CORP., Utica, N. Y.
One of the oldest and largest man-
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ings in U. S. A. Supplies stampings
and pressings, all sizes and shapes,
made from steel, copper, aluminum, and other
metals to Automotive, Electrical Washing
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Sizes and styles
to meet every grind-
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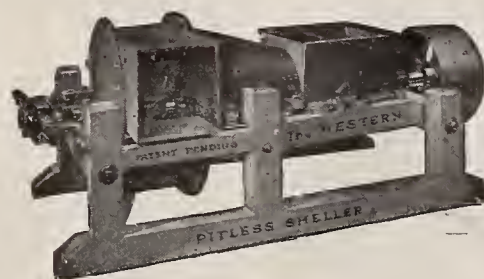
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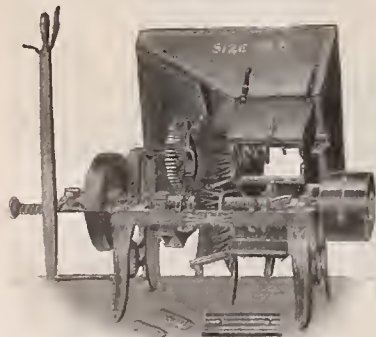
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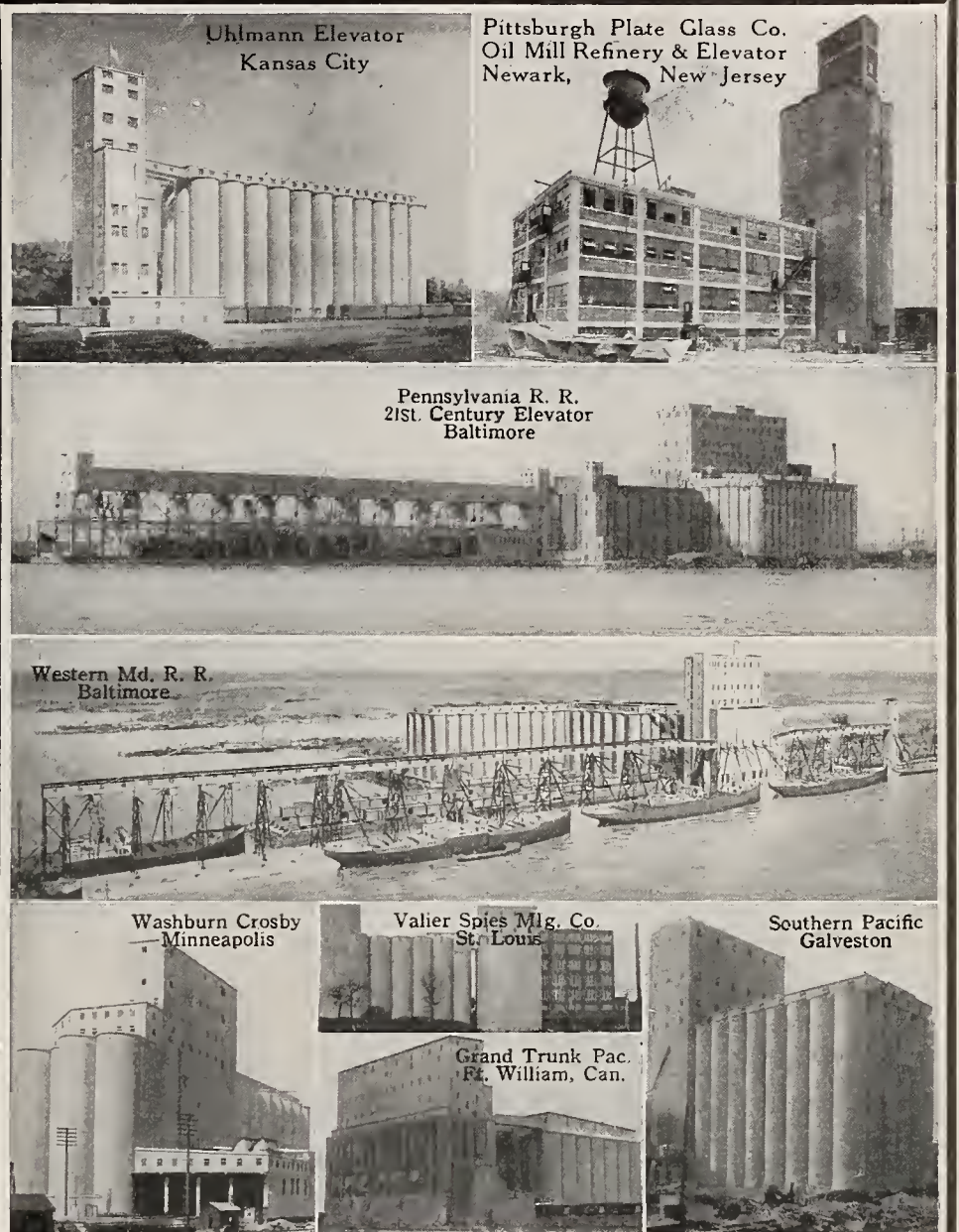
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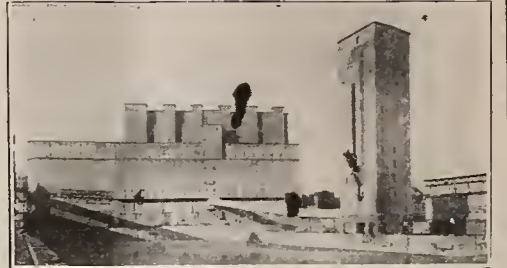
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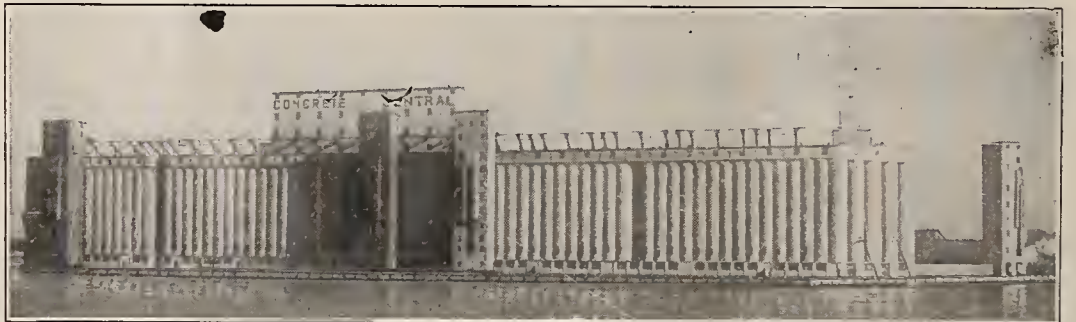
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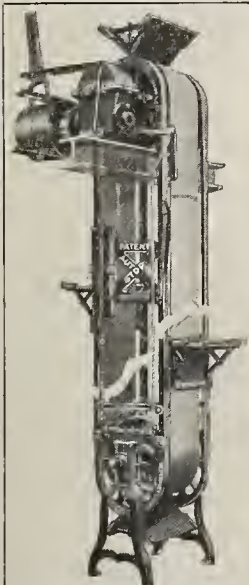
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*The Most Efficient Grain Handling
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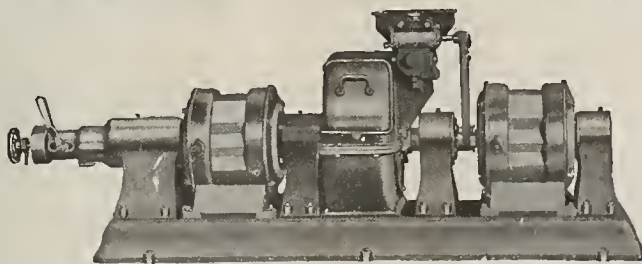
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Design and construction are covered completely in this book. The new edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

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However when good customers tell us what it is doing in their mill, for them, we just have to tell the world. Read this letter.

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THIS DISTINGUISHES THE BEST FROM THE REST

When you use our drier you brighten, polish and purify your grain, therefore you receive more money for it. If you doubt this ask the man who has used other makes and now uses Randolph. Our driers contain no woven wire cloth or perforated metal to cause clogging or loss of efficiency.

Palmer Miller Grain Co.
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TRACK GRAIN A SPECIALTY
Celina, Ohio,

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 Toledo, Ohio

Feb. 27th, 1927

Gentlemen:

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Another farmer peddled a big lot of musty wheat, bin burnt, moth matted, but got no bid. I paid him \$1.00 and poured in 3 gallons of water on each 40 bu. truck load—run it over drier and it came out clean and sweet, grading #3, discount 2¢ account of mow burnt berries. We were paying \$1.33 for #2 making us a profit of better than 33¢ net per bu. on this car.

You must add water to musty, moldy or mow burnt oats or wheat to create steam as the moisture has been burned out and with the direct heat system this washes and purifies the grain. The Randolph is a great money saver and maker on corn, oats and wheat.

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SOLD BY ALL
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Not An
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All Metal Steam Dryer

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CORN MEAL, HOMINY, BREWERS' GRITS AND MEAL, AND ALL CEREAL PRODUCTS. ALSO SAND, COAL DUST, GRAPHITE, CLAY, ORES, ETC.
 Automatic in operation, requiring no attention

THE CUTLER CO., North Wilbraham, Mass.

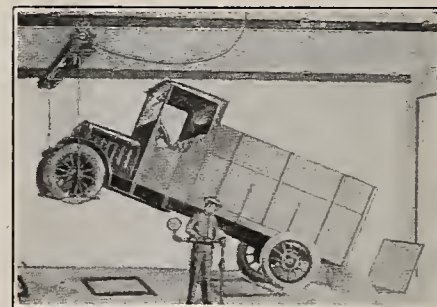
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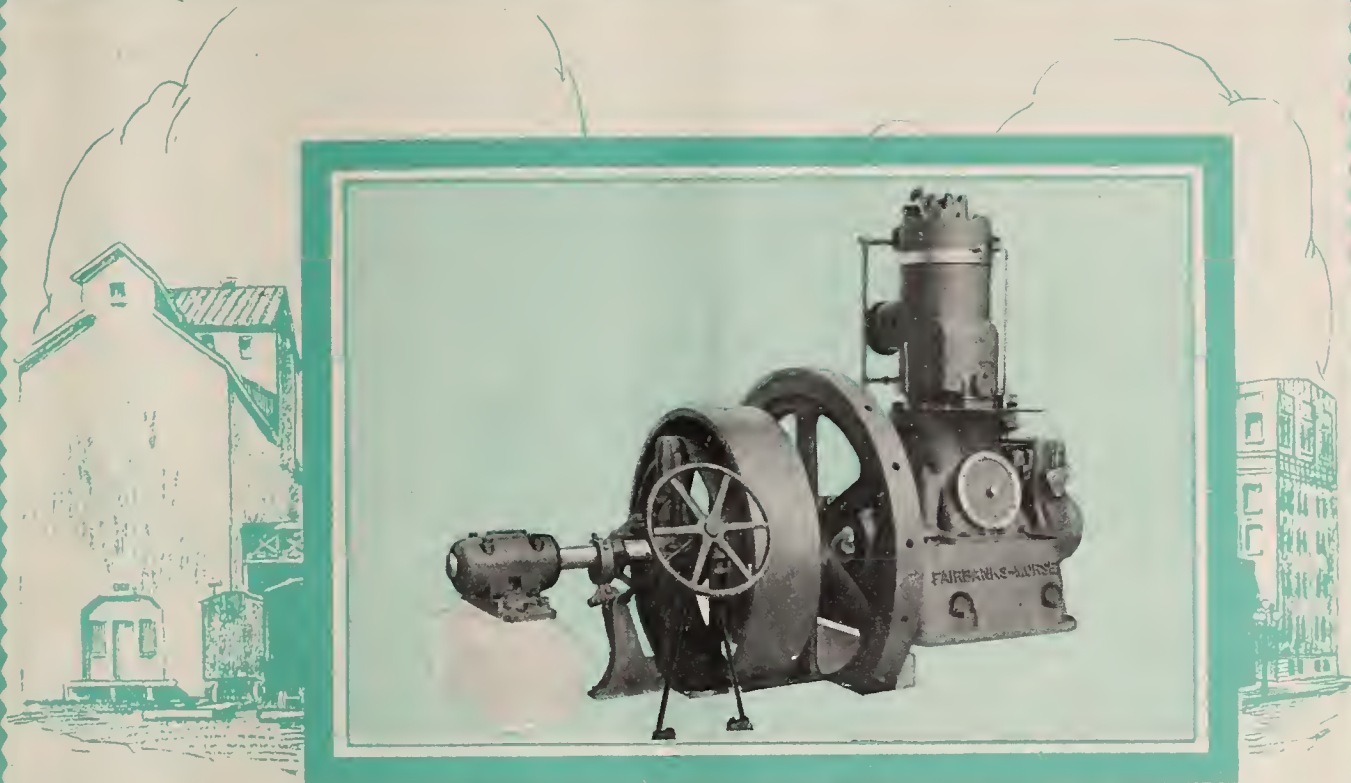
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The operators read about big savings made by Fairbanks-Morse Diesel engines in mills like theirs. They investigated. They made a comparison with the cost of electric power. They learned by accurate estimate the cost of using Diesel power.

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You can use Diesel power for practically all requirements. Fairbanks-Morse Diesels range in size from small units up to those for handling large power requirements. Ask for a detailed estimate of F-M Diesel economy with regard to your own plant.

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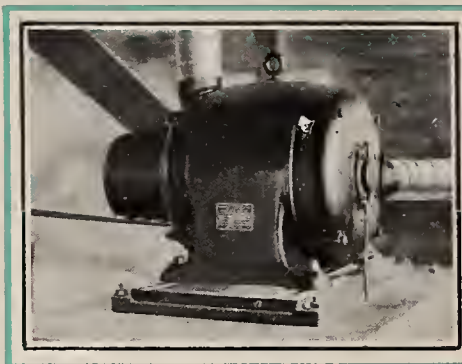
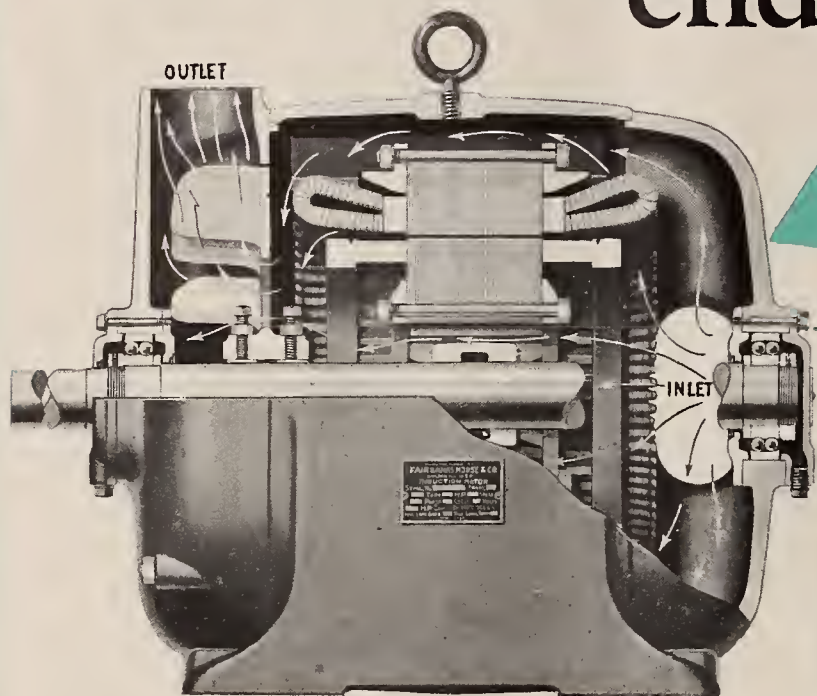
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Is that the description of your motors? It is the description of a Fairbanks-Morse Motor which your conditions designed.

This motor is cool-running, because it is ventilated by a thorough system which circulates fresh air from the outside through the motor windings. Liberally rated to handle overloads without overheating. Ball-bearing—the fa-

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How completely this motor solves the elevator and flour mill problem is shown by the fact that it is recommended by the Mutual Fire Prevention Association as a contributing factor in securing lowest insurance rates on mills and elevators.

Ask for descriptive bulletin

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NEW YORK GRAIN FUTURES

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The New York Wheat Futures Market provides an ideal hedge for millers and exporters.

The desirable grades only of Domestic Wheat are deliverable on contract with nothing below No. 2 Hard Winter, No. 2 Red Winter and No. 2 Northern Spring. The bonded contract is for the Standard Export Grades of Canadian Wheat deliverable under the original Dominion Certificates.

Wheat at Buffalo is at a most desirable distributing point for Eastern mills and from Buffalo export grain can be shipped via any Atlantic port as ocean freight is available.

Effective January 3rd, 1927, trading was inaugurated in Domestic Oats, Buffalo delivery. The contract is for No. 2 White Oats, United States Standard with No. 1 White deliverable at $\frac{1}{2}$ c premium and No. 3 White at $1\frac{1}{2}$ c discount under the contract price. Buffalo is in the direct line of flow of surplus oats from the Central West, Southwest and Northwest, and as a distributing point for the Eastern Trade is unequalled.

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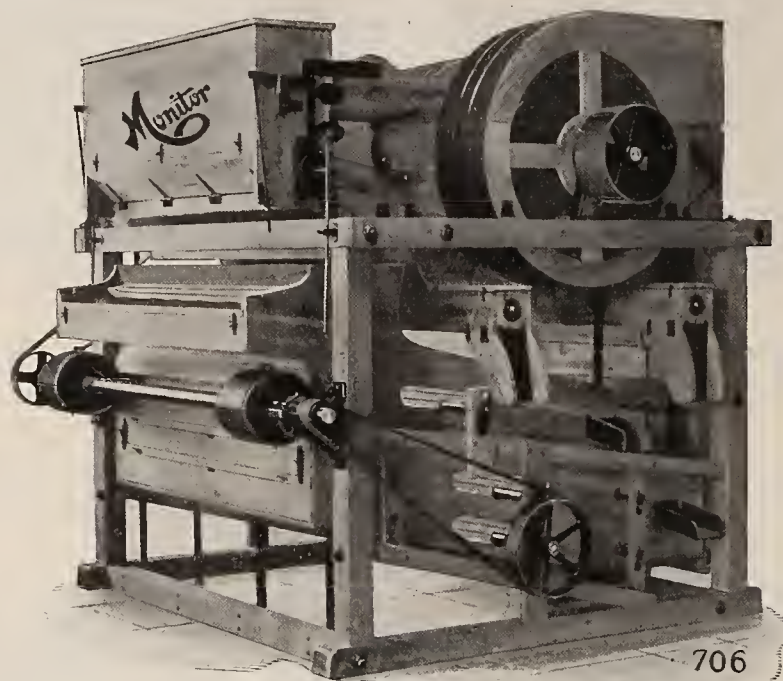
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you need it badly. If you had it then, it would pay for itself shortly. But perhaps the opportunity passes, only to recur again soon.

Is it not the logical thing to place a machine in advance of the particular time when its earning power would be so great? You know that it is and you want to be prepared. Then why not right now, let our representative call and advise with you and order the machine to be ready when the big rush begins.

Naturally, you will want to at least look the MONITOR over before buying. With its splendid reputation back of it, you cannot afford to ignore it and if you look over surrounding plants, it will be impossible to ignore it for it is standard equipment in most cleaning plants today.

Let us send our man to you now. Then if you do not want to buy, it is in your hands and you can so decide if you wish.

Don't wait until new grain commences to move. Have it all ready for the work you will then want to do.

HUNTLEY MFG. CO.

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So. Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year.

English and Foreign subscription, \$1.75 per year.

Established in 1882.

VOL. XLV

CHICAGO, ILLINOIS, MARCH 15, 1927

NO. 9

The History and Current Developments of Nashville's Grain Trade

A Review of the Modern Grain Storage and Handling Facilities and Service Offered to the Trade at the Tennessee Capital.

HIGH and dry above the flood waters which seriously hampered the operations of several Nashville, Tenn., grain receivers last December, stood the great storage facilities of J. R. Hale & Sons, the Gillette Grain Company, the Tennessee Grain Company, and several other concerns. These terminal elevators at the western edge of the city, are typical of the strictly modern and capacious grain storage units which Nashville grain men have provided for the country shippers in adjacent states, whose natural market route leads through the Big Bend State's capital. The Cumberland River has returned to its channel, and a duplication of the 1926 flood disaster is looked upon as an extremely remote possibility, so that even the grain operators whose plants lie close to the river front look for no more trouble for many years to come. The December flood was of an unprecedented volume and force, due to a phenomenal combination of weather circumstances in several adjoining states, which happen only once in 100 years or so.

So the Tennessee flood is history now, and grain firms and grain, feed, and seed concerns such as G. P. Rose & Co., report business better than, or at least, good as the average for this time of year.

Nashville competition than the Nashville trade is from the Texans. Furthermore, Nashville concerns have the advantage of long-established connections in the Southeast, and in the long run it is certain that their customers will stand the best chance possible against any competition.

H. L. Hanes, president of the Nashville Grain



CHAS. D. JONES



J. R. HALE



F. E. GILLETTE

Exchange, and vice-president of J. H. Wilkes & Co., feed manufacturers, states that the main outside activity of the Exchange at present is in connection with the downward revision of railroad rates on grain and grain products, applicable to Nashville. This problem is now being threshed out by the Interstate Commerce Commission, and relief along this line is looked for during 1927. The Nashville

change, and D. V. Johnson is second vice-president. The directors are: F. E. Gillette, of the Gillette Grain Company; Frank Ahren, W. R. Tate, and Hendrick Goode, of the Nashville Roller Mills. Charles D. Jones, of the grain concern bearing his name, who has served two terms as president of the Grain Dealers National Association, is also a director.

The Exchange in Tennessee's capital boasts one of the most efficient grain inspection departments in the United States. J. T. Roberts is chief inspector, with C. G. Greer as assistant, both of whom operate, of course, under Federal licenses approved by the Nashville branch of the Federal Grain Supervision office. Corn, oats, and Soft wheat are the principal grains handled although other grains, especially rye, are handled in considerable quantities in certain seasons.

In 1911, an option market, on the Kansas City plan, was established, and the swift rise and fall of this enterprise was not without its humor. The over-enthusiasm of some grain men participating in the venture was the cause of sleepless nights for several Nashville bankers during the final period of the option market's existence, but only a small loss actually developed.



ELEVATOR "B" OF J. R. HALE & SONS, NASHVILLE, TENN.



STEEL STORAGE PLANT OF THE GILLETTE GRAIN COMPANY, NASHVILLE, TENN.

Far more serious than the incidental flood damages is the depressing influence brought about by the increased acreage of corn, oats, and other grains in areas south of Nashville, particularly in Texas. In regard to this situation Nashville grain men entertain no hopes founded on false optimism, yet they point out that the nearest shipping points in Texas are as far as, or farther from the great southeastern market than is Nashville. Texas grain men are perhaps under greater pressure from

Grain Exchange was organized in 1903. Bert Douglas was the first president, and the posts of first vice-president and secretary-treasurer were filled by Messrs. Wilkes and Cornelius. Jno. Bennett is now secretary of the Exchange. Mr. Bennett's original connection with the grain trade was in Franklin, Tenn., and it was from there, in 1895, that he came to Nashville.

William Boyd, with both grain and feed interests, is first vice-president of the Nashville Grain Ex-

change. Direct wire connections were effected with Kansas City and Chicago, and in a short time a tremendous business developed. Unfortunately, it was a greenbug year, and the resultant scare in the grain markets caused a wide price spread (at one time 35 cents) between delivery date prices. The situation became so acute that the option market had to be abandoned, leaving certain Nashville traders with a strong aversion to the sound of the ticker. The whole loss incurred, however, amounted to

only \$3,000, and was charged to only one grain brokerage firm.

Several Nashville grain concerns do an extensive business in feeds. Among these is the Moon-Bennett Grain Company at 141 North First Street. This firm's plant was hard hit by the flood, but the setback was only temporary, and J. C. Bennett, Jr., president, reports a good business in both the grain and feed departments. T. Mins Tyner is vice-president, and J. Walker Locket is secretary-treasurer. This firm specializes in handling corn, and a large capacity sheller is provided for this trade, also a Randolph Drier of most modern type, with a capacity of 300 bushels per hour. Oats come in as a good second in volume to corn. "Moonbeam" Poultry Feeds are manufactured at this plant, and the quality of this line has won it a wide distribution. Memberships in the Grain Dealers National Association, and the Nashville Grain Exchange are held by firm members. T. M. Tyner is son of John A. Tyner, who, when the Cumberland River grain traffic was at its height, handled about 75 per cent of this business through his river warehouses.

One of the most prosperous grain and seed concerns in Nashville, is that of G. P. Rose & Co. In addition to the volume of business in grains and seeds, this plant is the wholesale and retail distributing point for several nationally known lines of products, including Pratt's Poultry Feed and

ROSENBAUM CORPORATION AWARDED HEAVY DAMAGES

A dispute over the settlement of the affairs of the Grain Marketing Company, between the Rosenbaum Grain Corporation and the Armour Grain Company, was arbitrated by Edward E. Brown, vice-president of the First National Bank of Chicago, who ordered the Armour Grain Company to pay \$1,600,000 to the Rosenbaum concern by May 10, 1927.

The total indebtedness of the Armour Grain Company to the Grain Marketing Company was close to \$3,000,000, but \$1,400,000 would go back to itself as a holder of 48 per cent of the Grain Marketing Company stock.

The financial brunt of the decision falls upon J. Ogden Armour, Philip D. Armour III, and Lester Armour, who own about 85 per cent of the stock in the Armour Grain Company. None of these is charged with personal complicity in the frauds.

Testimony at the hearings proves, according to Arbitrator Brown's formal decision, that during the night hours in the week just before the merger in 1924, employees of the Armour Grain Company changed grain samples which had been taken in Armour elevator bins by Board of Trade inspectors, making them of much higher grade. The company's books were tampered with, made to show presence of excellent grain where there was bin burnt wheat

Grain Marketing Company and that Thompson had boasted that Crombie was to receive \$20,000 for his part in the fraud. Nothing was done to investigate this letter and it was seen only by Marcy and Kellogg, vice-president of the Armour Grain Company, and Thompson.

On April 29 Crombie wrote a letter to Marcy, which started out by offering his resignation. Crombie stated that when the Grain Marketing Company came into effect Thompson came to him and suggested raising the stocks of wheat in the Northwestern Elevator as a means of making money for the Armour Grain Company.

That he had changed the samples taken by the Board of Trade sampling department, and that Thompson had promised that there would be a big split and that Crombie would get his share. That he had received nothing and that "he was interested in knowing whether the big split had come yet or not." What did Marcy do when he received this letter? He testified that he read it to or discussed it with both Kellogg and Thompson.

Marcy sent for Crombie immediately and persuaded him to withdraw his resignation and sent him back to the Northwestern Elevator, but did not interrogate him in any way, shape or manner about the change of samples. Crombie was continued as superintendent of the elevator until late in June, when Marcy told him to take a trip to California and gave him the Grain Marketing funds to make the trip. Incidentally his salary as superintendent was continued down to the date he testified before the arbitrator.

During all the intervening period neither Marcy nor any other representative of the Armour Grain Company said anything to any officer of the Grain Marketing Company or anybody connected with the two Rosenbaum concerns about the charges made by Crombie that the samples taken in August, 1924, had been changed.

Only one explanation of their conduct is possible and that is that they knew the charges contained in Crombie's letter that the samples had been changed was true, and that they had been and still were trying to conceal the fact.

Assuming that the grain in the elevator was not of the grades represented in the bill submitted by the Armour Grain Company to the Grain Marketing Company, and that it was seriously overstated in quantity and quality and that the samples had been changed by employees of the Armour Grain Company acting within the scope of the employment as a result of a fraudulent conspiracy on their part and for the supposed benefit of their employer, and that this change was known subsequently to the general officers of the Armour Grain Company and concluded by them, and that as part of the concealment they maintained an inefficient management in charge of the elevator, and that this change of samples and lack of knowledge on the part of the Grain Marketing Company of its true condition resulted in great subsequent loss in the operation of the elevator, to what relief are the complainants in this case entitled?

It seems clear to me that they are not limited to the difference between the actual value of the wheat and the price paid therefor, but are entitled to either relief by some form of equitable recession or to the proximate damages suffered by them as well as the direct damage represented by the difference in value.

A RECORD LOADING

A record was recently established in loading an ocean going steamship at Philadelphia, Pa., when the Portugese steamship *Inhambane* took on a full cargo of 300,814 bushels of grain in 41 hours after she had docked. This steamer was not of the type most desired for grain loading, as she has seven holds and three decks requiring thereby a great amount of fittings and considerable stevedoring.

The 41 hours included the time needed for fitting, cleaning and loading.

SOVIET ESTABLISHES EXPORT BASE IN HOLLAND

A grain export company has been established at Rotterdam, Holland, by the Russian Soviet Government, which has for a number of years been trying to establish the Netherlands as a point of shipment for its grain. The company has a limited liability.

Due to the bad crop of 1925 the Russian shipments decreased but in 1925 and 1926 large quantities of Russian grain were brought to Holland and sold or transhipped there for export. Moscow has already possessed such outlets for its grain in Hamburg and Copenhagen, but it is said that the latter port has not reached the expectations of the Soviet Government, while Rotterdam's position and excellent facilities for loading and discharging grain have been more favorable.



PARTIAL VIEW OF THE G. P. ROSE & CO. PLANT, NASHVILLE, TENN.

Remedies, Swift's "Vigoro" (a plant food), Swift's Digester Tankage, Meat Scraps, and Bone Meal, and Armour's Tankage and Meat Scrap. Both bulk and sack storage are furnished. Mr. Rose carries memberships in the Nashville Grain Exchange, The Nashville Chamber of Commerce, and the United States Chamber of Commerce. A very interesting department of the business, of which G. P. Rose is owner, is the manufacture and distribution of dog feed. This is a meal mixture of such unusual merit that it is bought today in every state in the Union, and the sales are still on the increase. It is manufactured in a new building with about 1,500 square feet of floor space. Just a year ago last July this meat and bone meal product was introduced, but additions to the plant have been made imperative on account of the nationwide demand. It is reported to be a sideline of great possibilities for elevators located in small towns and cities.

About half the elevator companies in Nashville distribute feeds or some other products as sidelines, while the other half deals altogether in grain. The result is a well-balanced grain trade mechanism which admirably serves the interests of shippers in Illinois, Missouri, and other nearby states which are located in the great market channel leading through Nashville. The plants are scattered over the entire city, and incoming grain from any direction is assured of prompt disposition.

and old wheat, Mr. Brown found. Then it was sold to the new farmer company as the choicest of wheat.

The principal witness on the charges of switching grain and altering records was Frank D. Crombie, who was superintendent of the Northwestern Elevator at the times covered.

Quoting directly from Mr. Brown's report, the aftermath of the sample switching is thus told by him:

The clear preponderance of the evidence is . . . that by the close of navigation in 1924 officers of the Armour Grain Company knew that there was a considerable quantity of badly bin burnt wheat in the Northwestern Elevator and that a large part of it had come from the Armour Grain Company.

As the reports of the appraisers disclosed only one small bin of badly bin burnt wheat they must have known, or suspected so strongly as to be chargeable with knowledge, that the samples taken in August had been tampered with. They did not disclose to the others interested in the Grain Marketing Company the bad conditions existing at the Northwestern. . . but on the contrary said there was no low grade wheat in the house. They did not change the management of the elevator.

The inference is unavoidable that they were then trying to conceal something that had happened in connection with the Grain Marketing Company and were willing to continue an inefficient management to effect that concealment.

On April 15 or 16 Marcy received an anonymous letter to the effect that Crombie had made \$1,700,000 for the Armour Grain Company by cheating with Thompson on the grades of grain delivered to the

Pneumatic Conveying of Grain

Adaptability, Elimination of Dust and Other Dangers, Reduction of Working Personnel Are Among Benefits of Pneumatic Conveying Systems

By FRED W. LAMPE, M. E.

WITH the enormous expansion in transoceanic commerce and railroad traffic, the shipment of grain from one part of the world to another has been so much increased that a corresponding development has been brought about in equipment for discharging, conveying and storage of grain. Although greatly perfected, such equipment has not been universally adopted, and there are, for instance, still a number of harbors used by international grain carrying vessels in which the discharging facilities are so antiquated that the vessels are unnecessarily delayed and much valuable time is lost. The situation is similar when we turn to railroad transportation. It is the object of this article to describe one of the most modern systems of grain conveying in order

straight nozzle has the greatest capacity and is used when working on a full pile; the curved nozzle serves for corners which are hard to reach, etc.; and the remnants are picked up by the cleaning nozzle. They are made for every duct diameter from 2½ inches to 9 inches, and are all light enough in weight that they can be moved from place to place and quickly connected to the conveying ducts, by one workman. Constructed of the best steel sheets, the greatest care is taken in the manufacture of the flanges in order to permit the exchange of nozzles within a few seconds.

The conveying ducts mainly consist of a movable sectional tube and a stationary part. Both are of steel pipes which can easily be connected or dismantled. In order to make these ducts as moveable as possible, flexible steel hose are inserted into the pipes.

Especially attention has been given to the design of the bends in the ducts, since, if these are not properly constructed the grain wears them out very quickly. They are mostly built with a rectangular transversal section and reinforced steel plates; so that the part against which the grain is constantly striking with great velocity can be easily replaced. They are made of an especially hard steel, which long years of experience have taught is best suited to the purpose.

As shown in the illustration Fig. 4, the suction ducts are hung on movable beams with which the elevation of the ducts can be adjusted. In order to move the conveying ducts freely and quickly with the aid of hand or electric winches, the dead weight is balanced with counter weights as much as possible. A modern plant is equipped with electrically driven winches which can be controlled from any location on shore, on the boat and even by the workmen at the nozzle by means of a transportable switchboard. It is also possible to make the lower end of the conveying ducts of a telescopic construction in order to avoid dismantling of the vertical ducts.

The great adaptability of the pneumatic system as compared with the bucket elevator and other systems may be seen in this.

The conveying duct in which all unnecessary bends are avoided for obvious reasons, enters through the swivel bend into the receiver. As may be seen in the various illustrations, this equipment consists of a lower part which is tightly screwed into the receiver and an upper part which swivels on the lower. Both parts are sealed by a stuffing

(d) housed in the receiver of the velocity. The air increases again and the particles of dust are hurled to the outside and fall into the conical hopper. The dust is removed from it in the same manner as the grain by an automatic discharge lock (e).

It is now possible to mix this separated dust into the grain again in a continuous current or to bag it separately by means of a two-way delivery spout (f). The first way is always preferable if the exact weight of grain must be delivered. An advantage of separating the dust in the receiver is that the air which passes on the pump is purified of all coarser dust. If necessary, a second dust collector may be installed between the receiver and the vacuum pump. The advisability of this depends upon how

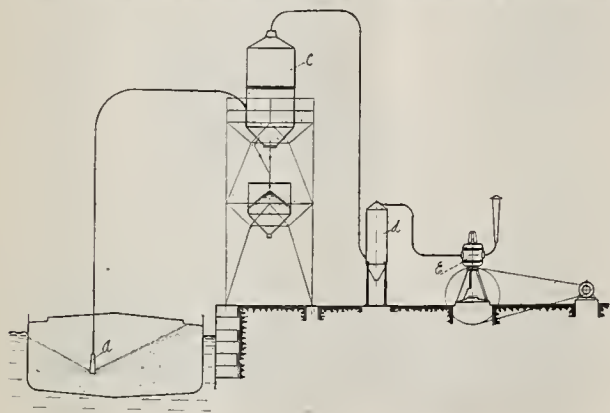


FIG. 1. DIAGRAM OF A PNEUMATIC SUCTION CONVEYING SYSTEM

to stimulate the development of this branch of transportation.

It is the advantageous characteristic of grain to flow easily from piles or through pipes at a certain angle; but it has also a great disadvantage: It always contains a certain amount of dust which is detrimental to each conveying installation, dangerous on account of its inflammability, and exceedingly unhealthy to the workman. The good solution of the dust problem offered by the pneumatic conveying equipment is also of greatest importance in the installation of modern grain elevators, etc., in order to avoid short weights.

Grain such as wheat, oats, corn and rye are especially suitable for pneumatic conveying, and modern engineering practice has developed this system to heretofore unthought-of capacities. There are two principal types of pneumatic conveying equipment.

Fig. 1 shows a diagram of the suction system. Grain and air enter the nozzle (a) and pass into the conducting pipes (b), which deliver the mixture of grain and air to a receiver (c) with a cyclone dust collector. While gravity causes the grain and dust to flow through the discharge locks, the air which has previously been purified in the cyclone leaves the receiver at the top, through a filter (d) of special design, passes in certain cases through an air chamber, then to the vacuum pump (e) and is discharged. The filters completely purify the air.

The pressure system, Fig. 2 uses an air pump (a), which conducts the air through air pipes (b) and an air chamber (c) to the feeder (d), which serves the opposite purpose to that of the discharge locks in the suction system. Grain and air now enter the conveying ducts (e), which lead to the discharge cyclones (f).

In both the suction and the pressure systems, the grain is suspended in the air current while it is being conveyed.

The purpose of the nozzles is to pick up the grain in such quantities as can be conducted through the conveying ducts. They consist of an inner pipe, which is surrounded by a mantle pipe. This covering pipe can be adjusted to control the air current, i. e., to adjust the nozzle to the material to be conveyed.

There are three principal forms of nozzles: The

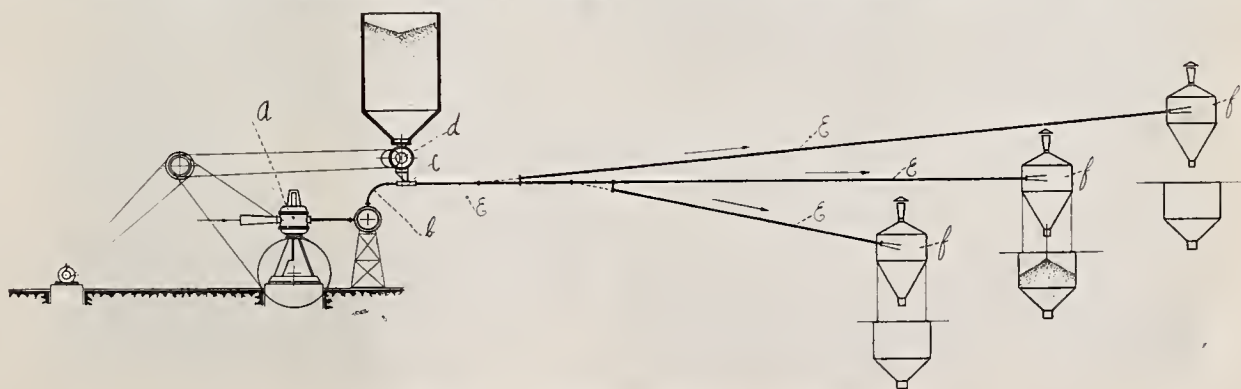


FIG. 2. DIAGRAM OF A PNEUMATIC PRESSURE CONVEYING PLANT

box and have exchangeable reinforced steel back plates.

Fig. 3 shows the receiver. Grain and air stream into its lower part and the grain falls into the cone-shaped bottom, since the velocity of air is considerably diminished. In separating the grain from the air current the first function of the receiver is accomplished.

The grain is now delivered from the receiver by the automatic grain discharge lock, the operation of which may be seen in Fig. 3. A vaned drum (a) rotates within a receptacle (b), both of cast iron.

The air is removed through the outlet (c) but must first pass through the cyclone dust separator

clean the air which is blown out must be. By using dust collectors similar to those which are much used in flour mills, the air may be practically pure. The air ducts themselves consist of steel sheets and may be installed as necessary. Their position does not influence the conveying operation.

The pumping station may be arranged at some distance from the unloading equipment, and there are many plants of large capacities in which the vacuum pump is at a distance of 300 to 400 feet from the unloading plant. This may be of ad-

vantage if the pump is to be placed in already existing buildings or is to be operated by machinists also in charge of other work. Installation at a distance is also necessary if one pump is to be used successively for several receivers.

On the other hand, it is also possible to combine the pumping station with the unloading plant, and this brings us to the newest type of air pump, the turbine blower, which is of special advantage for all traveling discharging plants.

Turning now to the description of the pumps which are used for pneumatic conveying, we will first give some data concerning the pressure and the velocity of air required. The vacuum in the

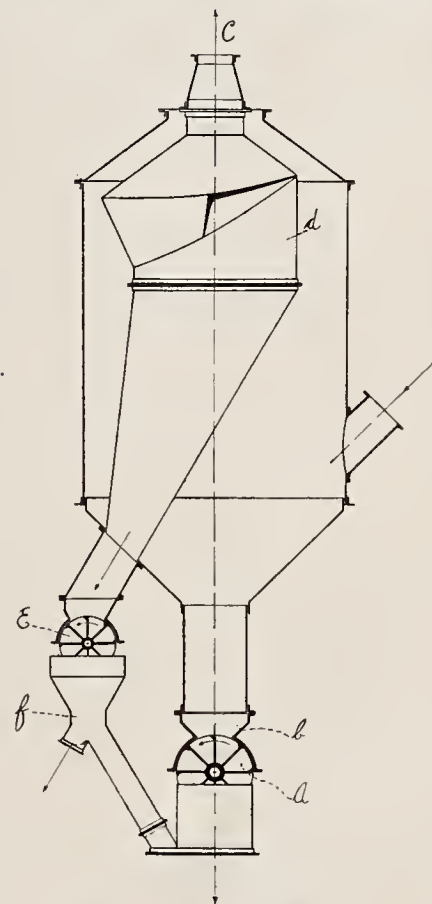


FIG. 3. VIEW OF A RECEIVER

receiver will generally vary between three and seven pounds per square inch, while the air velocity for conveying grain and similar seeds (peanuts, cottonseed, sesame, etc.) should be about 4,000 feet to 7,800 feet per minute, and must be considered individually for each plant.

Three types of pumps may be used: Rotary pumps for small plants (farms, farm silos, small mills), with a capacity up to 500 bushels per hour; piston air pumps; and turbine blowers for large plants.

The piston air pump is mostly of a vertical, one or two-cylinder duplex type. Since the air entering the cylinder still contains dust, the pistons are not lubricated. In designing the construction especial attention is given to making the suction and pressure valves easily accessible and exchangeable. The valve plates operate without friction and are provided with springs. During the two decades in which pneumatic conveying has been developed, these pumps have been perfected to the highest degree.

The advantages of the turbine blower are very evident. In place of the heavy backward and forward moving mass in the air pump which requires heavy foundations, the construction of the turbine blower is much lighter, since it may have from 3,000 to 8,000 revolutions per minute. The only effect against the further advantages of a lower cost of installation and less space requirement is a somewhat higher power consumption. The construction of these turbine blowers, especially designed for pneumatic conveying, has now been brought to complete perfection and a solution has also been found for the problem of adjusting the turbine blower automatically to the various vacuums required. On account of its lighter construction and the smaller amount of space required, the turbine blower is more suitable for installation in traveling unloading plants, etc., for which purpose it was always necessary formerly to install the air pump separately from the unloading equipment.

The question of whether an air pump or a turbine blower should be used, must be solved by an expert engineer. Every pneumatic conveying plant

in case of stoppage in the flow of grain or other disorders or troubles.

When considering the installation of a pneumatic conveying plant for certain problems, the power requirements are not the only decisive factor though some data on this point may be of interest. In general the amount of power required depends on the kind of installation, the material to be conveyed and the length and kind of conveying ducts. Roughly speaking, however, it may be figured that in the case of ducts of from 100 to 250 feet, 100 bushels heavy grain per hour require about 3—5.4 horsepower. Every bend in the pipes increases the power requirement. Distances up to 1,200 feet can be covered by the suction or pressure system. It is advisable in every case to consult an expert engineer to determine the amount of power required for a new plant.

Fig. 4 shows a pneumatic conveying plant for unloading ocean vessels bringing grain from North and South America, built in Genoa by the Amme-Luther Works, of Brunswick, Germany, who are represented in the United States by the American Miag Corporation of Buffalo, N. Y. The hourly capacity of this plant is about 28,000 bushels. In this case, the installation was made with six towers, which travel on a pier, because the many qualities of grain arriving in one steamer, are sold to different dealers and must, therefore, be unloaded separately. On the other hand, this arrangement permits reaching all hatches of the steamer at the same time. The vessel can dock on either side of the pier and the suction ducts can describe about 270 degrees of a circle, thereby reaching vessels in both positions. The two suction ducts of each unloading tower are hung on steel beams which are raised or lowered by electric winches steered from distant points as required. The connections for the air ducts are in the floor of the pier as well as the openings through which the grain falls to the six belt conveyors and the electric contacts for connecting the unloading towers. The six belt conveyors are located within the pier which is channel-shaped. The six vacuum pumps are in the elevator building (not shown in the picture). The plant is so arranged that each of the six towers

is connected with a two cylinder vacuum pump. The engine room in the pontoon contains all the requisite machines for such a vessel, for instance, water pumps, bilge pumps, dynamos for lighting, etc. The typical parts of the conveying plant are plainly visible in the illustrations: The receiver, the air ducts, between receiver and pump, the discharge pipe and the four conveying ducts suspended by four steel beams.

The grain passes through the suction pipes into the receiver, is weighed in an oscillating, suspended hopper scale and delivered through the discharge



FIG. 5. FLOATING PNEUMATIC CONVEYING PLANT; CAPACITY, 12,000 BUSHELS PER HOUR

pipe into the barges. By placing an intermediate elevator behind the scale any other way of conveying the grain can be arranged.

Besides living quarters for the crew, the pontoon also contains offices, etc., for the grain dealers and, if necessary, for the customs officer. In order that no time may be lost while changing the barges if suitable steam winches are installed for shifting them about.

The standard type of these conveyors is for about 12,000 bushels hourly capacity but can be built in any other required size. For the total operation of such a floating pneumatic unloading plant, only 15 men are required. Its great mobility constitutes the greatest advantage. It can be moved to any location where it is necessary to transport grain from one vessel to another. Two, four or even six of them can operate on a large vessel at the same time and the steamers can be unloaded at any place in a harbor where they find anchorage, without the very considerable expense of lying at piers, etc. The saving brought about by this feature alone is so important that almost all grain is reloaded by this means in harbors such as Hamburg, Rotterdam and Antwerp. This most modern and efficient unloading system will doubtless also be installed in American harbors soon.

1. Fewer workmen are required as it is not necessary to shovel the grain into the apparatus. The nozzles pick up the grain where it lies.

2. No dust is created; the men work under the most sanitary conditions and thus increases the efficiency of the laborer. No fire hazard.

3. Weather conditions have no effect on the conveying operation. All ducts and also the lighting cables can be passed through a very small opening which is almost completely covered.

4. Pneumatic conveying plants are easily adjusted to all conditions. The conveying ducts can be placed according to the requirements of the harbor, the elevator or the mill.

5. The grain is thoroughly aired and this greatly improves the quality of damp, mouldy grain. Insects and diseases germs are destroyed.

6. There is no danger to the workmen, since there are no movable parts as in the case of bucket elevators.

In comparison to these important advantages the

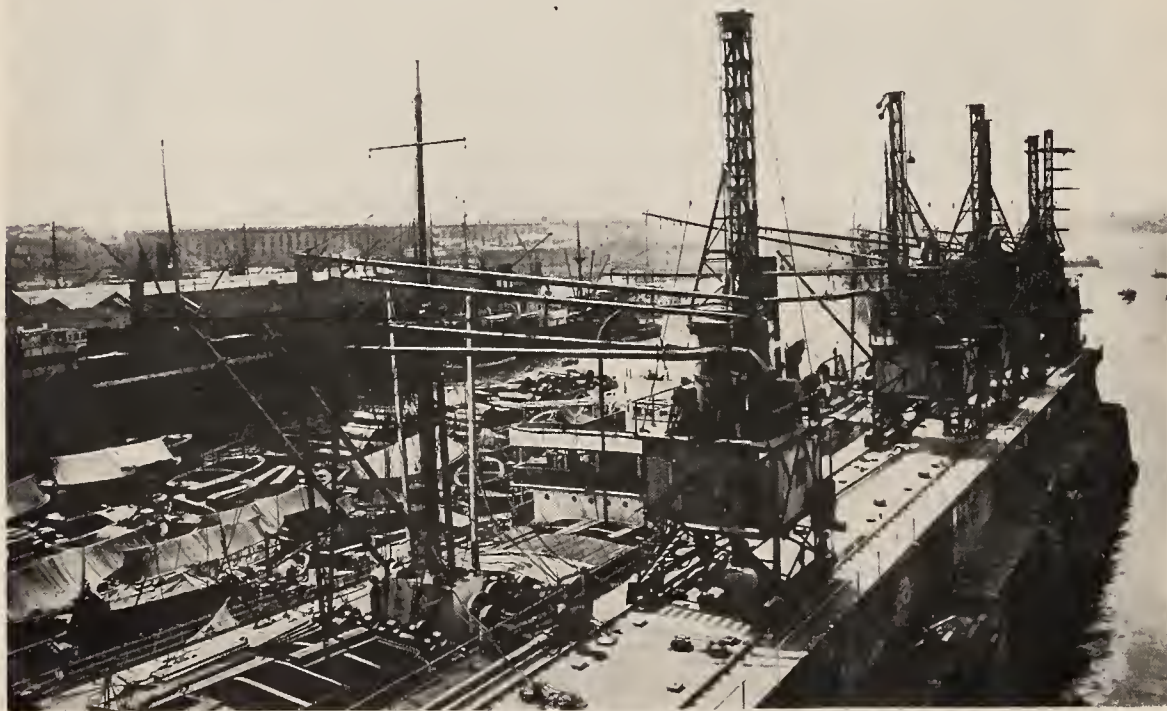


FIG. 4. PNEUMATIC CONVEYING PLANT AT GENOA. CAPACITY, 28,000 BUSHELS PER HOUR

brings its own problems which require exact study of the entire situation.

There are a few auxiliaries which are of importance to all pneumatic conveying systems. Safety valves are installed in the air duct between receiver and pump to protect them. If the vacuum becomes too great, these open and admit air. Manometers near the pump or on the receiver permit controlling the uniform operation of the equipment. Through air inlet flaps near the pumps and the receiver, outside air may be let into the air ducts in order to temporarily and instantaneously interrupt the operation without stopping the pump. This is necessary

may be connected with each of the six pumps, and that each unloading tower can deliver the grain it draws from the vessel to any one of the six belt conveyors.

The next illustration, Fig. 5, shows floating pneumatic plants, built by the same firm, unloading grain from ocean vessels into river boats. These floating suction plants are an especially efficient form of pneumatic conveying equipment which has become standardized during about 20 years of experience. They are fitted with steam boilers and a vertical double expansion steam engine of about 400 horsepower. The steam engine is directly con-

somewhat higher consumption of power is entirely negligible, since not only one of the features of a system should be taken into consideration, but the aggregate of all its characteristics should determine its application to certain conveying problems.

This article must be limited to a general description of the pneumatic conveying of grain, without going too much into detail. However, it may be added that other gritty materials are now very successfully conveyed with this system and especially coal.

PENNSYLVANIA ADOPTS NEW WHEAT

About six years ago the Pennsylvania State College Agricultural Experiment Station under the direction of Dr. C. F. Noll developed a high yielding good quality Winter wheat, and named it Pennsylvania 44. This strain was introduced to the farmers of the state in 1921. Today it occupies 30 per cent of the acreage in Pennsylvania. This wheat was developed from a single head found in a field of the Fulcaster variety and has steadily averaged yields of five bushels or more to the acre over the varieties it has replaced.

IOWA GRAIN MAN PASSES AWAY

On February 19, Charles Belz, a well known grain man of Conrad, Iowa, and father of Clifford Belz, president of the Western Grain Dealers Association, died at his home in Conrad following a three months' illness from heart trouble.

Mr. Belz was born in 1860 and had been a resident of Conrad since the town was founded. He started in the contracting business in 1886 and later a lumber, grain and coal business was started, and this is still in existence, operated by the firm of Charles Belz & Sons. With him were associated his sons, Clifford and Raymond A. Belz.

He had been actively associated with community enterprises and was a director of the bank in that town.

Surviving Mr. Belz are his widow, two sons and three daughters.

FOUR NEW VARIETIES OF GRAIN

After eight years' experimentation, four new varieties of grain have been developed at the University of Minnesota under the direction of Herbert K. Hayes, professor of plant breeding in the division of agronomy and plant management. The new hybrid grains are known as Marquillo wheat, Anthony oats, Glabron barley and Emerald rye.

Marquillo wheat is a beardless variety, having a good strength of straw, early maturity and high resistance to black stem rust and leaf rust of wheat. It is the product of a cross between Marquis and Lumillo. From the former it gets breadmaking qualities, and from the latter rust resistance.

Anthony oats was developed by crossing Victory, a white midseason variety of oats and Minota. It is especially resistant to stem rust and excels in weight per bushel and yield per acre.

Glabron, the new barley, is of the ordinary commercial six-row variety. It appears to have stronger straw than Velvet barley and gives higher yields. It does not stick to the clothes or irritate the skin of persons handling the crops. For this reason it is meeting with popular approval and is becoming widely used by farmers.

The supply of seeds of the new grains is being increased and will be ready for distribution in small quantities in 1928.

HANDLING GRAIN GRADING APPEALS

Appeals totaling 34,462 were brought before the 35 officers of the Federal Grain Supervision of the United States Department of Agriculture from July to December 1926. They were appeals from grades on grain as found by state inspection departments. The kinds of grain and the number of appeals for

each are as follows: Wheat, 21,288; corn, 8,990; oats, 2,705; rye, 1,210; grain sorghums, 130; feed oats, 9; mixed feed oats, 29; and barley, 101. The Chicago office heard 7,177, more than half of which was on corn.

Taking all offices combined, the grades appealed from were changed in 44.6 per cent of the cases, of which 38.8 per cent was given a higher rate. The grades in question were found to be correct in 55.4 per cent of the appeals.

This appeal service cost grain men \$36,367 which was turned into the United States Treasury as miscellaneous receipts. The appeal fees from the Chicago office amounted to \$11,855, more than half of which represents fees for appeals on more than 12,000,000 bushels of grain loaded into steamships.

ILLINOIS HOUSE BUILDS LIBERAL SURPLUS

Anyone who has traveled up and down the State of Illinois will remember how thickly it is peppered with country elevators. In recent years there has been considerable change in many country stations and more substantial structures are replacing old ones in many localities. One strictly modern edifice of this sort is the reinforced



ELEVATOR OF THE ELWOOD (ILL.) FARMERS GRAIN COMPANY concrete elevator belonging to the Elwood Farmers Grain Company. It is situated in Elwood, Ill., on the right of way of the Chicago & Alton Railroad. The elevator occupies a ground area 34 feet in length and 34 feet wide, and is 85 feet high.

The storage capacity of the house is 40,000 bushels, which is divided into 11 units. The shipping capacity is 7,000 bushels per hour. Of the various bins, storage is divided as follows: Two of them can hold 1,600 bushels each; two can hold 2,000 bushels each; and seven are so constructed as to accommodate 4,700 bushels each. The rest of the storage is in smaller units.

Electric power is used, and the current is provided by central station service. There are two electric motors, of 7½ horsepower; and belt and chain drives are used. There are 30 feet to each belt and 20 feet to each chain, with two of each, all on the main floor of the plant.

Facilities for unloading include two wagon dumps and a truck dump. The house has two hoppers and the truck dump has a track which carries it to either hopper. The usual wagon scale has been provided. For protection against fire, the elevator is equipped with chemical fire extinguishers on both the main floor and the top floor.

The principal grains handled are corn, oats, wheat, barley and rye; and around 200,000 bushels are handled in the course of the year's business. The chief sidelines merchandised are coal, feed, tile, fencing and posts; and an excellent trade in coal has been built up.

The Elwood Farmers Grain Company was incor-

porated in April 1914. The elevator building and its contents of grain burned in March 1917. A new reinforced concrete elevator was finished in October 1917 and immediately placed in operation. The concern is capitalized at \$10,000, and pays a dividend of 8 per cent on its stock. A surplus has been accumulated which now amounts to \$21,000.

F. A. Deutschman, manager of the company, has been associated with the organization since its inception. He was born and reared on a nearby farm, and is thoroughly familiar with local conditions and the needs of the community. He has had 22 years of experience in the grain business and has a record of consistent competence and integrity.

ONTARIO POOL ORGANIZED

The latter part of January an Ontario grain pool was launched by farmers of various parts of southwestern Ontario at Chatham in that province. Its organization is similar to that of the grain pools already in existence in the three Prairie Provinces of Canada. The contracts which have been adopted for its use are similar to those used by the western wheat pools providing for farmers to sell all their grain through the pool for a term of five years.

On account of the fact that the Ontario grain pool does not, at present, control any grain elevators in the province, negotiations have been instituted with elevator owners in the wheat district of the province. It seems safe to assume that the Ontario grain pool will follow the example of the western pools and lose no time in acquiring control of a number of grain elevators.

Wheat production in Ontario is far less than in any one of the three prairie provinces of Canada, but is more important than many people seem to realize. According to official returns, the Ontario wheat production in 1926 was 23,100,000 bushels, valued at \$28,888,000. The formation of the Ontario grain pool makes another important advance of co-operative development in Canadian agriculture.

GRAIN SITUATION IN RUSSIA

Due to lack of storage facilities, increased difficulty of railroad transportation and snow and cold weather, the slackening in Russian grain procuring in January was even more apparent than in December, reports the United States Department of Agriculture.

Procuring during January reached only 75 per cent of the amount planned. It was well in advance of January procurings from the 1925 crop, however, and total procurings for this season up to February 1 amounted to 9,281,000 short tons compared with 6,988,000 up to the same time last year and 4,130,000 the year before.

In South Russia the rate of procuring increased toward the end of January with improving conditions and in anticipation of purchases by the peasants of implements and livestock for the new campaign. In Siberia and Ural, on the other hand, an unfavorable tone has been developing, which has reduced the rate of procuring for all of Russia. This situation is especially unfavorable because of the grain's high moisture content.

Stocks along the railroads in Siberia, Ural and Kasakstan on the first of February amounted to 560,000 short tons and were increasing even with increasing efforts to provide transportation. The extent to which these stocks are piling up will be realized when they are compared with total procuring which up to January 1 amounted to 867,000 short tons in Siberia and Ural. In the past two years total procuring in Kasakstan has averaged a little over a fourth of the total in Siberia and Ural. In Ural the grain procuring is running about 45 per cent oats and it is considered unlikely that the procuring plan for food grain will be carried out. Cold weather during January has not been unfavorable generally to the fall sown grains, except for some damage in Crimea and possibly in North Caucasus and Kasakstan where the fields were poorly covered. The Russian paper *Isvestia* stated on February 4 that bad floods were to be expected in the Volga region this spring.

King Corn

**Corn Is Most Important Factor in Increasing the Wealth of America,
and Is Used in Manufacturing Over 300 Articles**

By P. E. GOODRICH

THE yellow stream of corn that flows from the Mississippi Valley each year into the markets of America and the markets of the world, is the most important product of America. New wealth thus created each year is greater than the combined value of our gold, silver, copper and iron mines that nature has been creating and storing for thousands of years and when once removed from the earth, is not again restored. Not so with imperial corn, the same soil with intelligent husbandry will produce corn year after year, decade following decade, America's most pressing need; the foundation on which rests our permanent prosperity.

Corn, as we know it, is a strictly American product though we read in Holy Writ of corn and a most beautiful and romantic story is wound around the name of Jacob and his favorite son, Joseph, who on account of the jealousy of the other sons and their desire to get rid of him, sold him into Egyptain slavery. Here he became the trusted chamberlain to the ruling Egyptian Pharaoh. Time passed and a famine came to the land of Canaan. Jacob, learning that there was an abundance of corn in Egypt, and this necessity he needed so badly to feed his family, his tribe, herd and flocks, sent his sons down into the country to procure corn. There they met their brother, Joseph. The beautiful story ends by an abundance of corn being furnished Jacob's sons and they went home with provisions for the father, his family and herds. Thus, the father and his favorite, the child of his favorite wife, were united never again to part.

We know not what particular cereal was the medium of exchange. It might have been wheat, rye or barley—probably the later as we do know it was not American or Indian corn. This was unknown save in America until Columbus and his caravels touched San Salvador's shores. Here they found maize, or Indian corn, as it was formerly called. Columbus realized its importance and on his return to Spain took samples of corn back with him and also cornmeal and showed royal Spain how to prepare it for human food. Corn products had not the wide variety of uses then as now.

The Indian ground the shelled corn in the most primitive manner, either in a wooden mortar, which was made by burning a recess in the end of a log and using a round ended club to grind or crush the corn. Or, the most enterprising native used a mortar made of stone, using a pestle made of stone or made of heavy bone. Others ground their corn by putting it on a flat stone and using an upper stone and by turning or twisting one over the surface of the other until the corn was pulverized. This method was largely used by the first immigrants to America and continued to be used until stone burrs were brought over from Europe. Indeed, it is within the memory of many of us that the better equipped mills in our country were still using imported French burrs and it is only within the past 50 years that modern machinery came into use, in the reduction of this prime American product into human food and its other important component parts.

We know not how old corn is in the two Americas nor through what process of evolution or selection it came into such perfection as found by Columbus. But that it was the universal grain used by the ancients in both Americas, there can be no doubt. Grains of corn have been found in the tombs of the ancient civilizations of Peru—no one knows how many thousands of years old. On the recently excavated walls of the temples of the Maya cities in Central America, have been laid bare large and beautiful carvings showing that corn was raised and in addition to its use as human food, was used as an object to worship. In the adobe of the Pueblos of Arizona, corn has been uncovered that has been buried many ages. All evidence points to the

fact that American corn was the principal cereal of the aborigines.

There is a personality about corn that makes it more human than any other product of our soil. It is a home loving product. Wherever the sun shines and enough soil can be scraped together to cover it wheat, oats or barley will mature. Indeed almost from pole to pole, wherever people live, wheat, cabbage and potatoes will grow and mature. But not so with our friendly corn, it must have deep, warm soil, hot sunshine, plenty of moisture, some humidity in the air and hot nights to produce corn. It is home loving and only reproduces best in the same locality year after year. The importance in breeding corn has not come about by the gathering of seed from wide apart sections as is all other farm products, but by starting with the best corn available in a certain locality, and proper



P. E. GOODRICH

selection year by year and by close persistent in-breeding which have brought it to its greatest perfection.

Not so with any other grain or vegetable. To improve oats in quality and yield, we go to the northwest for seed and thus increase weight per bushel and yield per acre. So it is with other farm grains and products.

Corn will not produce a paying crop save in a limited area in our country where the days are hot and the nights warm. It will not mature, no difference how rich the soil where the nights are cold and it must have water in abundance; frost must not come early in the fall or we have a ruined corn crop. No difference how favorable the soil, corn must have 90 to 100 days, with hot days and warm nights and the absence of frost to properly mature.

More skill and intelligent husbandry is necessary to produce corn than any other cereal. The coolly of India can and does produce rice and wheat but not corn. Millions of acres of splendid corn lands are untouched in Russia, yet her peasants produce not corn but rye and wheat. China has untold acres of corn land and corn climate yet they subsist on wheat and rice. So it is left for our own central United States and Argentina to produce more than 95 per cent of the world's marketable corn.

I said American corn was a home body, it truly is—it doesn't gad around and never gets far from home. Ninety per cent of it is consumed on the

farms where it is produced or adjacent to them. While Argentina only produces about as much corn as Iowa, the state of bankrupt farmers and bursted banks, yet Argentina exports more corn than the entire United States. Corn as corn, is our smallest grain export, except barley and oats. But indirectly we export large amounts of corn in pork, lard and other hog products, beef and beef products and mutton.

It was formerly thought that corn could not be profitably grown north of Iowa but by intelligent selection of seed we now grow corn profitably in Minnesota, Wisconsin, Nebraska, South Dakota and as far north as central North Dakota. So it is becoming, by intelligent selection and breeding, a mortgage lifter over a much wider area than 25 years ago and it is a matter of conjecture as to whether there may be further increases.

American corn has no rival as the most versatile product of our soil, in its natural state or manufactured into food or used in the arts and sciences. It enters into the manufacture of over 300 different articles, some of them essential to the prosperity and the happiness of our people. The following are some of the most important to which it is put. It is used in the manufacture of nitroglycerine, adulteration for Para rubber, fireworks, axle grease beer, shoe heels, buttons, candy, chair cushions, pancakes, gums, alcohol, electrical instruments (parts formerly made of hard rubber), glues, horse-collars, gin, glucose, glue, gum arabic, gun cotton, amber, soap, molasses, mucilage, oil cloth, fine machine oil, screw cutting oil, glycerine, the better grades of writing paper, paint, coffee substitute, phonograph records, paste, pitch, pith for packing war ships to protect them against recoil and shot, printers' ink, varnish, radio equipment, starch, confectionery, sugar, shoe polish, talcum powder, whiskey, wax, vinegar and last but not most powerful, that firey liquid—corn whiskey, that delectable fluid that the well known Mr. Dooley said was "bread and meat to Dimmeocrats but death to Republicans."

The value of our North American corn crop is greater than any other crop grown in this country. In nine of the last 12 years the value of corn has been greater than the combined value of wheat and cotton. In either of these years, the value of corn has been greater than the combined value of all cattle and hogs produced for slaughter. The farm value of hogs produced for slaughter has been second to corn in every year since 1919. The average value of our corn from 1919 to 1924 was \$1,577,000,000. The higher prices received in 1915 to 1919, the value rose to \$3,024,000,000. The 1920 crop, the largest every harvested, shrunk in value to \$2,150,000,000. The 1921 crop, which was the next largest crop we ever produced, shrunk in value to \$1,303,000,000, or to a less value than the pre-war years of 1910 to 1915.

His majesty, the American hog, is the largest consumer of corn. Forty per cent of our total crop is fed to hogs on the farm. Horses consume 20 per cent and cattle about 15 per cent. The next largest use for corn is for human food. This leaves but 15 per cent to be used in the arts and sciences and for export, an almost infinitesimal amount being exported. Ten per cent appears to be a small amount to be used for human consumption but when we consider the enormous amount of bushels produced, it is evidence that we do like our corn cakes, corn bread and roasting ears.

The outstanding use for corn is on the farms, fully 85 per cent of it being used in that way. Six states—Iowa, Illinois, Nebraska, Missouri, Indiana and Ohio—produced 45 per cent of the corn produced in America; within these states 45 per cent of the ever increasing number of hogs in our country are grown or fattened.

Twenty-five per cent of the cattle, other than milch cows, were owned in these states and they produce 32 per cent of the chickens and 35 per cent of the hen's eggs. So we can well say corn is our greatest necessity and our nation's prosperity is more closely dependent upon imperial corn than any other commodity. Oil, gas, gold and silver sink into almost insignificance in comparison with

this product of America's soil, moisture and sunshine, that 500 years ago was only known to the American Indian.

The exportation of corn has never been large. For the years 1913 to 1918 we exported only about 43,000,000 and these were the war years. When Europe needed our food grain most, in 1919 and 1920 when we produced such colossal crops of corn, we only exported 11,000,000 and 18,000,000 bushels and in no year since has our exportation of corn reached that of the year 1920, our largest crop.

One bushel of corn will produce about 43 pounds of cornmeal or 40 pounds of glucose. A bushel of corn will produce 4.62 gallons of distilled spirits or about 40 drinks. A bushel of corn will produce one and one-half pounds of fine corn oil. It is said that the base of the new automobile enamel—"Duco"—is corn and that it takes about two bushels of corn to paint a Ford. In the pre-dry days, it generally took a good farm and a ruined life to paint a man's nose.

Let us proclaim corn as the greatest American cereal, it constitutes 60 per cent of the tonnage of all cereals grown in our country and 50 per cent of money value. More than half of our corn is grown in what is known as the corn belt. Nevertheless, corn is the leading crop in value in the corn and winter wheat belt and is the all important cereal in the cotton belt.

In song and story, literature and sentiment of the Southland, corn is closely interwoven and linked with cotton and cane. May it well be, for it was unquestionably in the sunny Southland where it was first grown. No less authority than Dr. Harry E. Barnard of the American Baking Institute makes the statement that three large plants are now operating in the manufacturing of corn sugar and that corn sugar is preferred by our large bread making concerns on account of its better adaptability for that purpose. He predicts that within 10 to 20 years our country will be independent of the outside world as to sugar and that corn sugar will supply the gap now supplied by imported sugar and thus make a home market for more than 4,000,000,000 bushels of corn annually. Our corn belt by better farming can easily supply this enormous amount when the added demand makes the price remunerative.

While Indiana is not the largest producer of corn, yet it is close in amount to Iowa and Illinois but in the production of pure corn, of the highest quality, she has no rival for the past 10 years. Year after year, Indiana has taken all the first prizes at the Chicago International Corn Show. Indeed, our county has taken most of these prizes and the Lutz family has taken the championship prize for the past three years. The average yield per acre for the whole state of Indiana is larger by several bushels than any other corn state and is about eight bushels per acre larger than the average of the United States—its quality as a commercial commodity is surpassed only by Minnesota and South Dakota.

Our beloved, poet, James Whitcomb Riley, has glorified corn with one of his most popular poems that appeals so strongly to those we know corn:

*When the frost on the punkin
And the foddies in the shock*

can we not see and hear it and feel the late October bracing air when he sings

*The husky, rusty russel of the tossels of the corn
And the raspin' of the tangled leaves, as golden as
the morn.*

Without corn our matchless prosperity would have been impossible, this mighty empire of the Central West could not have been and the broad prairies could not have been subdued and made the agricultural garden of the nation. Why should not poets sing its praise, artists convey its beauties to canvass and chemists delve into its mysteries, seeking new uses for this typical American product, that as time goes, only a short while ago was known only to a few American savages and in 200 years has grown to be our prime necessity and the backbone of America's agriculture? Aye, Aye, the corn, the royal corn, in whose golden heart there is sustenance for all the nations.

DANGER IN CO-OPERATIVE ENTERPRISES

There have been many examples of the dangers which beset the way of those who would organize and operate co-operative enterprises. And still another comes from the Province of Saskatchewan, Canada. Premier Gardner has just announced that the Saskatchewan Co-operative Creameries, which has so often been referred to as an example of the progress of the co-operative principle, has been an absolute failure.

Its loss in 1926 was \$187,000. The equity of the share-holders has been wiped out and the Government has had to arrange a merger with a successful private company as the only means of saving the situation.

INDIANA ELEVATOR HAS MANY SIDELINES

An elevator which gains a certain distinction by its neat appearance and general architecture is that of the Wolfe Grain Company, in Shipshewana, Ind. The house adjoins the tracks of the New York Central Railroad; and it has its storage unit of tile construction and a frame work floor and office. The equipment and layout in general are thoroughly up-to-date.

The house has a capacity of 30,000 bushels of



ELEVATOR OF THE WOLFE GRAIN COMPANY, SHIPSEWANA, IND.

grain, and this divided into six tanks. The receiving capacity is 1,000 bushels per hour, and the shipping capacity is 2,000 bushels per hour. Invincible Grain Cleaners, made by the S. Howes Company, Inc., of Silver Creek, N. Y., are used; and there is also a Western Corn Sheller with a capacity of 500 bushels per hour. A 100-bushel feed grinder completes the equipment in this part of the plant.

Electricity is used both for lighting and power; and current is supplied by central station service. Five electric motors, including among them several Fairbanks Morse installations, are in use. These motors are of the following respective horsepower: 30, 10, two of 15, and 7½. A belt drive is provided.

Screw conveyors have been furnished for unloading purposes. Two scales of the registering type were supplied by Fairbanks, Morse & Co., Chicago. With the existing machinery it is possible to handle the company's volume of business expeditiously and with no appreciable exertion.

Practically all kinds of grain are handled in this elevator, and the annual volume runs around 260,000 bushels. A number of profitable sidelines are also included in the company's activities. The chief sidelines are feed, flour, tile, hay, straw, lime and coal; and probably coal and feed are the major items among those listed.

This business grew from a small farm elevator which was doing an annual business of \$30,000 in

1913. It has reached a maximum of \$750,000 since that time and the limit has not been reached. The new elevator was erected in 1921. The old house is used for warehousing purposes, and the second floor for feed storage.

It was in 1913 that Wolfe Bros. started operations, and in 1915 the firm was changed to Wolfe & Bevington, Frank Bevington having become a partner at that time. In 1924, E. A. Wolfe became sole owner of the plant and since then the enterprise has gone on under the present name—the Wolfe Grain Company.

SASKATCHEWAN CO-OP. ISSUES FINAL STATEMENT

A statement has just been issued by the Saskatchewan Co-operative Elevator Company, Ltd., of Regina, Sask., giving profits of \$1,065,466 earned during the financial year ending July 31, 1926. Net profits totaled \$825,546, the largest in the history of the company and exceeding the previous year's net profits by almost \$500,000.

The grain handling facilities of the company have been bought by the Saskatchewan Pool Elevators, Ltd.

The assets of the company are worth approximately \$12,500,000 of which \$11,059,000 will be received from the pool representing the value of the company's grain handling facilities after deducting current liabilities of \$1,499,300 and \$2,091,565 owing to the Saskatchewan Government, there will be available for distribution to the shareholders \$9,076,850.

Through the sale of the company, shareholders will receive in excess of \$150 for each \$7.50 invested in 1911, when the company was organized.

SHIFT FROM EXPORT TO IMPORT BASIS AFFECTS PRICES

Certain agricultural products which used to be exported in enormous quantities from the United States are now fluctuating in a narrow margin between an export and an import basis. Among them are Spring wheat, corn, dairy products and beef. This is noted by the United States Department of Agriculture, which says commodities that are shifting from an export basis to an import basis are subject to great fluctuations in price. In one year their production may be a little less than domestic consumption. In that case the home demand alone determines the price. In another year, when the production of these commodities slightly exceeds domestic requirements, they become subject to world price conditions.

There is constant shifting in the relationship of the United States to world production and foreign markets, says the Department. Our agricultural export surpluses declined for several years before the war. Foreign demand in the war period revived our exports, but since the war the pre-war declining tendency has been resumed to a considerable extent. Nevertheless, some classes of wheat, as well as pork, tobacco and cotton, seem likely to continue on an export basis, perhaps even more definitely than before the war. Exports of apples and prunes are increasing, and oranges and rice have shifted from an import to an export basis.

In the case of commodities now on an import basis or moving in that direction, the problem is to keep our producers well informed as to crop and livestock conditions, quantity and quality of production, the prices for which products will be produced, tendencies of production, and prospects for future production in those countries which compete with them in our own markets, in order that they may plan their production to meet this competition at home. While the tariff does afford protection to those commodities of which we do not produce all of our domestic needs, foreign production and the prices for which that production will sell still place price limits upon our own production.

A petition in bankruptcy has been filed by Clarence L. Williams, grain broker of Boston, Mass., with liabilities of \$13,275 and assets none.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., MARCH 15, 1927

SCANDAL AGAIN

AS LONG as there is a grain trade, or rather as long as there is human nature, we will have grain trade scandals. The latest one, involving accusations against the Armour Grain Company, at Chicago, is giving innocent and guilty parties alike in the terminal market a bad name with the country shipping trade and the farmers in a dozen states.

The greater the proportions of a scandal, the greater is the cry for justice from all sides. Unfortunately, when so much is involved as is in this case, the task of careful investigation is a complicated one. But the Chicago Board of Trade in this instance has the advantage of owning a painstakingly prepared transcript of testimony bearing directly on the case, taken by a reliable banker. The committee must utterly disprove his contentions, or accept his findings as accurate. If they are accurate, salutary action will undoubtedly be taken in short order.

SACK HANDLING COST

PACIFIC COAST farmers lose about \$1,555,000 on the 111,000,000 bushels of grain now handled each year, because of the added expense of the sacks, twine, and labor involved when grain is handled in sacks. This is no guess, but the conservative estimate arrived at by Federal investigators of the Bureau of Agricultural Economics. This amount which is lost in 12 months, say the investigators, would build 466 elevators of 50,000-bushel capacity at shipping points, at a cost

of 50 cents per bushel capacity. As a matter of fact, elevators can be built much cheaper than this.

The figures are new but the idea of sack handling as an expensive system is old. It is a method that will give way only gradually for the sack system gives the western grain dealers an excellent supplemental business in sacks and twine.

The grain sections are equipped with flat warehouses, which are inexpensive structures compared to bulk elevators. To change to the bulk system would mean the abandoning of the warehouses and the building of elevators. Because of the efficiency and speed of the bulk system, profits may be made by handling large quantities of grain at low unit rates. But by buying grain in the country in sacks and exporting it in bulk, the dealer has the used sacks for resale. From these facts there appears to be little or no incentive for the grain merchant to furnish bulk facilities at country points at the present time.

USE OF CORN WASTE

TRANSFORMING the waste materials of corn into wood substitutes, paper and many other products, will make Iowa one of the greatest of industrial and manufacturing states, and will bring a new era of prosperity for corn belt farmers. This is the hope of Dr. O. R. Sweeny, head of the chemical engineering department of Iowa State College, and to back up his expectations he has accumulated real evidence. He claims that \$180 worth of lumber substitutes can be obtained from only one acre of corn. The cost of production for the acre would run to about \$80, he says, leaving a profit of \$100 besides the return from the shelled corn.

There has been much hopeful talk along this line for several years, but little action on the part of Iowa investors. The Des Moines corn products plant still is idle, and no new concerns for the processing of cobs or other waste materials have been established. Every few months a Federal or state agency announces a new corn motor oil to substitute for gasoline, a new furniture substitute, or a new corn food product. Either these ideas must be of only theoretical value, or the supposed industrial leaders of the corn states must be drowsing.

NASHVILLE'S TRADE

THERE are both pessimists and optimists among the grain men of Nashville, as in every other market. That the latter have a little the better of the argument at present is evident from the notices of the three and a half-cent rate reduction on grain and grain products which have been mailed to the grain dealers in the Tennessee capital since our last issue. The reduction is effective on Nashville-bound grain from Ohio River crossings, and is the first item of rate relief which the Interstate Commerce Commission has granted to the Nashville grain trade for some time. Other more important reductions are pending.

Meanwhile, grain men in Nashville are de-

veloping all the business in grain that is possible, and in addition, are developing an immense feed trade which would be impossible if all their time were occupied with grain operations. The very geography of this city on the Cumberland is a promise that it will be a great grain center for ages to come. Terminal operators though by no means depend on the simple advantage of location to attract trade. Some of the most modernly equipped grain storage and grain handling plants in the country are to be found in different sections of Nashville. As a terminal market, it will stand comparison with many larger grain cities.

PROTEIN INFORMATION

ON CERTAIN occasions when the supply of high protein wheat has been less than the demand, premiums of as much as a cent have been paid for each added tenth of 1 per cent of protein over a given basic amount. To trade on so close a margin taxes the protein test to its uttermost and is the cause of many of the complaints as to inaccuracy of chemists in making their determinations.

To determine how close different laboratories should be able to report results of protein tests on the same sample of wheat, the methods and technique used in making protein tests were studied in mill laboratories, commercial protein-testing laboratories and grain-inspection department laboratories in the Central Northwest and Southwest by United States Department of Agriculture experts. The results of this survey are incorporated in Bulletin No. 1460, as well as the report of an exhaustive laboratory study relating to the value of many of the outstanding methods and technique used by the different protein-testing laboratories.

A standard method for making protein tests is described. Recommendations are given for eliminating sources of error, so that concordant results between different laboratories can be obtained.

We wish to call attention again to this comprehensive work which is now available at five cents per copy from the Government Printing Office at Washington, D. C. It is the last word on the subject thus far, and all dealers handling high protein grades should be conversant with the various facts set forth in it.

CALLING OUT THE RESERVES

FARM reserves of grain, as given by the Government reports as of March 1, showed larger holdings than the trade expected. Stocks of wheat on farms were 130,000,000 bushels, or 30,000,000 bushels in excess of last year, and the largest since 1924, when they were 138,000,000 bushels. Mill and elevator stocks of 85,000,000 bushels were 10,000,000 bushels in excess of last year, while the total holdings of wheat in all positions, including terminal market supplies, aggregate 277,000,000 bushels compared with 224,000,000 bushels in 1926. And the new crop of wheat is now on the way.

EDITORIAL MENTION

Famous last words: "Mr. Haugen, shake hands with Mr. Coolidge."

When President Coolidge vetoed and thereby killed the McNary-Haugen Bill two weeks ago, its supporters announced they would renew the fight next year. If the bill and its name can be altered radically, they have a chance of victory.

The Farmers Elevator Association of Minnesota has petitioned for the northward extension of the Mississippi Barge Line service. This project seems to have the rank and file support of the grain trade in all the Mississippi Valley territory above St. Louis.

Defective bearings have cost American elevator owners in the neighborhood of \$15,000,000 during the last 15 years, owing to the fires which they start. Bad bearings are still tolerated. Self-aligning, anti-friction bearings on all head shafts at least, are the logical preventives in this case.

If you are considering plant improvements this year, bear in mind that lightning is the only source of elevator fires not chargeable to the human element. Lightning protection by rods is inexpensive, for that the installation cost will be saved in lower insurance premiums, is as sure a thing as taxes—and that's an especially sure thing this month.

"It is reported," says a contributor to an Iowa newspaper, "that when the Chicago Board of Trade was informed that the president had vetoed the McNary-Haugen Bill, that august body cheered and immediately advanced the price on all grains." The diabolic tendency to cheer on that occasion manifested itself in several places.

North Dakota last year, with its wealth of dairy products, hogs, mutton and wool, was able to offset the loss in its wheat crop. Six years ago this would have been impossible. It would also have been impossible six years ago to buy dairy, hog and sheep feeds at the average Dakota elevator. Now such merchandise is stocked as a matter of course.

A group of millers in Nashville, Tenn., was listening to a radio program. After a technical talk, the announcer informed the audience that a negro spiritual would be sung, which had been "dedicated to the Soft Wheat Millers Association." A grain man guest, sitting near the loud speaker laughed rudely when the title of the song was announced. It was "Steal Away."

Cotton seed and cottonseed meal was so cheap during the early part of last fall that many farmers exchanged seed for meal, and thus obtained meal for a very low cost. For this reason a large quantity of cottonseed meal is expected to be used as fertilizer. At

usual prices it is not economical to use cottonseed meal as a fertilizer. One hundred pounds of nitrate of soda is about the equivalent of 200 pounds of meal. Therefore, in cases where 100 pounds of nitrate of soda ordinarily is used, it is advisable when using meal to substitute 100 pounds of meal for 50 pounds of soda.

Wheat at \$300 per bushel. That is the price received by the new Kansas wheat king, A. R. Schlickau, of Haven, Kan., who has submitted the prize bushel of wheat in the contest fostered by his state's agricultural college. Another Kansas farmer's record, however, was better than that of the king himself in one respect. W. W. Baker harvested 66 bushels per acre.

Minnesota hens annually produce meat and eggs with a value of \$60,000,000, or twice the amount of the wheat crop value in that state. This proportion reflects the economic readjustment which has been taking place there. To meet the new conditions, elevators from one end of the state to the other now sell poultry feeds and other rations to take the place of the grain business lost through agricultural depression.

The practical value of the New York State barge canal system is denied in the report of Colonel Stuart Frederick Greene, head of the Department of Public Works. He recommends that the grain elevator at Oswego be sold by the state at auction. It was built at a cost of \$1,500,000 to handle grain between lake boats at the port of Oswego and canal barges destined to points inland. The elevator has never been used, and stands as a classic example of a municipally owned white elephant.

Testimony to be introduced in the general investigation hearing of freight rates on grain and grain products before the Interstate Commerce Commission at Fort Worth, Texas, April 7, has been outlined carefully by southwestern grain men. The hearing is one of the most important and far reaching in the history of the southwestern rate activities. It involves the bulking of all grain and grain products; rate complaints now pending before the commission, and rates on these products now in effect in territory having as boundaries Minneapolis to Galveston and from the Mississippi River to the Pacific.

The United States Department of Agriculture has just prepared for distribution by radio, advice and direction as to the best way of treating smutty wheat. A much better way has been discovered and tested than the old way of dipping the seed in copper sulphite or formaldehyde. Copper carbonate dust is the best thing to use. Two or three ounces, and not more, of copper carbonate dust should be applied to each bushel of seed. A box or barrel fitted with a dust-proof door and mounted on an axle can be utilized. Some dustproof container is necessary because the dust is unpleasant and dangerous if inhaled. The operation should be carried on in a well

ventilated place and the operator should use a wet handkerchief or piece of cheese-cloth over the mouth and nose. Experience has proved that this treatment is cheap and effective, that it increases the yield per acre, causes no injury to the wheat, and permits the use of less seed per acre. Another of the many advantages is that it can be applied in the slack season some time before seeding. Treated seed, of course, must not be used for food or feeding, or for any purpose whatever except seeding.

Federal representatives have made a survey of the north and central sections of Texas, where green bugs have been reported, and they find them in abundance in the volunteer oats and some fall-sown oats and advise that the most feasible plan for checking them is by the immediate turning under of these infested fields. Otherwise they fear that they will develop so rapidly that they will destroy all the wheat and oats. Elevator owners in this southwestern area should take an active part in keeping the facts relating to the green bug pest before the farmer public. There is enough trouble brewing in the North on account of the corn borer, without having another pest menace spread in the South.

As an illustration of the difference between American machine methods of grain production and "cheap," oriental labor methods, Arthur Huntington of Cedar Rapids, Iowa, in a recent address, made the statement that it takes four coolies in China to raise an acre of rice, while one Chinaman in California can raise 3,000 bushels. Oriental laborers in the grain fields of the Golden State are paid \$6 and "found," or the equivalent of \$8 per day. Much of the grain finds a market across the Pacific. This is interesting when it is known that the Chinese Agricultural Association recently dispatched commissioners to San Francisco to protest against Americans flooding China with cheap rice, thus destroying their agriculture.

Now that the announcement has come out that the Canadian Pool interim payment on Spring wheat grades is 15 cents per bushel, it is difficult to understand the air of mystery and the apparent explicit denials during the past several weeks. Although the announcement is accompanied, both in the statement given to the press and in the circular letters sent with cheques, by carefully selected propaganda material, the outstanding fact is that pool payments this year are on a lower scale than in the two previous years. On No. 1 Durum, 20 cents per bushel is being paid as against 15 cents per bushel on Spring wheat, but the initial payment on this grade of Durum was only 90 cents, whereas \$1 per bushel was the basis for No. 1 Northern. Total payment up to date on No. 1 Durum is, therefore, five cents less per bushel than No. 1 Northern. At times No. 1 Durum has sold as much as 18 cents per bushel over No. 1 Northern and the average market price of the former since August is \$1.39¾. The *Grain Trade News* suggests that no propaganda can obscure these facts.

H. A. RUMSEY
Chicago

NEWS OF THE TERMINAL MARKETS

R. L. EARLY
Cincinnati

BALTIMORE DIRECTORS ELECT

The Board of Directors of the Baltimore Chamber of Commerce has elected the following to direct the activities of the exchange during the coming year: President, Gen. Henry M. Warfield; vice-president, Adelbert W. Mears; secretary-treasurer, James B. Hessong (re-elected). The Executive Committee consists of J. A. Manger, chairman; Edward Netre, vice-chairman; William Rodgers, Charles E. Scarlett and Gustav Herzer, Jr.

Mr. Warfield is president of Henry M. Warfield-Roloson Company, Inc., insurance agents, and has been a director of the Chamber since February 1926.

CO-OPERATIVE BILL SIGNED BY THE PRESIDENT

In the closing hours of the last Congress, President Coolidge signed the bill to insure farmers' co-operative associations the right to own seats on boards of trade and exchanges and thereby enjoy the benefits of economical and efficient marketing.

It specifically sets forth "that no rule of a board of trade shall forbid, or be construed to forbid, the return on a patronage basis by such co-operative association or organization to its bona-fide members of moneys collected in excess of the expense of conducting the business of such association." It gives to associations suffering discrimination and denial of membership privileges by boards of trade the right to sue in the Federal courts for a mandatory injunction to compel admission and to recover damages sustained.

FT. WORTH HAS GOOD RECORD

The receipts of grain in the grain inspection department of the Fort Worth Grain & Cotton Exchange during January showed an increase of nearly 400 cars over December 1926, although it was slightly under the receipts of January 1926. The number of cars shipped from Fort Worth, originating there and inspected there, also showed a decrease both from the preceding month and from January 1926.

In January of this year 569 cars were shipped; in December 1926, 662 cars, and in January 1926, 671.

In commenting on the situation, President Simons of the Exchange said: "Receipts have been comparatively high and demand has been slow, yet Fort Worth dealers have broadened their grain market and have managed to dispose of all offerings very promptly, and to the advantage of the shipper. We are today shipping Texas grain all over the United States and to three or four foreign countries, and are able to command fair prices in competition with dealers all over the world."

GRADES IMPROVING AT TOLEDO

Cash wheat receipts have been heavy and milling demand light. Best demand has been from exporters. Two Red selling at the present time at the biggest discount under Chicago futures in many years. Indications are for a let up in the movement, as country reports say little hauling being done owing to impassable conditions of road.

Corn grading showing improvement. Bulk of receipts in Toledo have been grading No. 5, but another week of dry weather will improve grade to No. 4. Sellers of cool and sweet have been paying more than elevators could pay and dry the corn to grade.

Demand for better grade of oats is considerably

better, as is also the grading of receipts here. Farmers evidently held their good oats and sold the damaged ones. Receipts very light.—*Letter from J. F. Zahm & Co., Toledo, Ohio.*

INVESTIGATING COMMITTEE APPOINTED

Directors of the Chicago Board of Trade at the regular meeting on March 8 appointed a special committee to investigate the published reports which followed the findings of the arbitrator in the case of the Armour Grain Company, Rosenbaum Bros. and Rosenbaum Grain Corporation.

"This action," said Edwin A. Doern, first vice-president, "was taken in accordance with Rule 151 which provides that the directors shall appoint a committee from the general membership when there is any reason to suspect that any member has been guilty of an offense against the association."

The following were appointed: L. F. Gates, chairman, J. P. Griffin, James A. Patten, Allen M. Cle-

L. F. GATES, CHAIRMAN OF THE SPECIAL COMMITTEE AND
FORMER PRESIDENT OF THE CHICAGO BOARD

ment, James Norris, Lowell Hoit and Frank G. Coe. This committee will go into all the transactions of the Armour Grain Company with Rosenbaum Bros. and the Rosenbaum Grain Corporation in the formation of the Grain Marketing Company, a \$20,000,000 co-operative organization that failed, according to Mr. Brown, because of the blow dealt its finances when it bought low grade and damaged wheat from the Armour bins at the price of good grain.

No charges have ever been filed with the Board of Trade and the investigation by the special committee is made solely at the behest of the Board's directors. It is empowered to summon witnesses and place them under oath. In the event they find sufficient evidence to warrant it they are to file charges.

The investigation may extend over several weeks, Mr. Gates said, inasmuch as there are 10,000 pages of testimony that was given in the hearing before Arbitrator E. E. Brown to be considered, in addition to the taking of testimony from others.

NEW YORK'S VIEW

Axel Hansen, chairman of the Grain Futures Committee of the New York Produce Exchange, says: "A strengthening factor of the world's markets which a great many lose sight of is the fact that the wheat exports from the three largest exporting countries outside of the United States,

namely, Canada, Australia and Argentina are well controlled and not forced upon the world's market unwisely. In Canada the wheat pool owns practically all the surplus of Canadian wheat and in no way a pressing seller. The same refers to the Australian pool which has already disposed of a very substantial part of their surplus.

"In view of the unfavorable outlook for the Indian crop and the recent large demand from Oriental countries, it may reasonably be expected that the pressure from Australia will be relatively light on the European markets. As far as Argentina is concerned the grain exports from that country are practically in the hands of three or four large export houses who up to now are understood to have sold over 40 per cent of Argentina's export surplus of wheat."

PEORIA TAKING CARE OF ARRIVALS

The Peoria market has handled very little wheat. Not enough to be of any importance to the general trade.

We have, however, handled large quantities of corn and during the past month we imagine that the arrivals in this market have equalled, if not surpassed, any other like time in the history of the Peoria Board of Trade. Values here have ruled most of the time fully as good and in some cases better than other competing markets. We have recently had so much corn here that we ran into a congestion which took away the demand of some of the biggest industries. However, in spite of this there has been enough general demand to cover market in fairly good condition as compared with others. The daily requirements of the Peoria industries are around 70,000 bushels of corn. In a very short time it should be around 80,000 bushels.

The big movement seems to be very nearly over as farmers will soon be busy with field work and then the drastic declines in the cash corn make the prices so low to the farmers that it is not likely that they will be sellers to any great extent until there is a decidedly better improvement in values.

The oats trade in Peoria, like all other markets, has been comparatively light. We have had a fair movement this way and a greater proportion of them have been good White oats, although at least 60 to 75 per cent have been No. 4 White or poorer. Values ruling about in line with other markets, though our prices for No. 3 White have been rather better than anywhere else.

We imagine the movement of all grain from farmers hands will soon be very light.—*P. B. & C. C. Miles. Peoria, Ill., in a recent letter.*

SPECULATING IS NOT GAMBLING

Judge Michael McKinley, of the Superior Court of Cook County, Ill., on March 7 held that brokerage transactions in grain and stocks do not represent gambling and losses sustained are not recoverable. The suit was brought in 1925 by Charles H. Leech, attorney, acting as "common informer" under the "public policy gamblers law" and using the account and experience of R. L. Darby, coal operator, as the basis.

Mr. Darby had a trading account at Stein, Alstrin & Co., and incurred losses of \$3,475 in both grain and stocks. Mr. Leech claimed treble damages under the law by which one-half would go to him and the other half to the county. The case has pending since March, 1925, and Judge McKinley

instructed the jury to bring in a verdict for the defendants, as such transactions were not gambling. Mr. Darby did not appear in the suit, as he had refused to sue for recovery.

Stein, Alstrin & Co., brokers, were represented by L. E. Ferguson and Walter Bachrach of Moses, Kennedy, Stein & Bachrach. A similar suit, brought by the same plaintiffs, is pending against Hornblower & Weeks, but it has not yet come to trial. The amount is practically the same as in the Stein, Alstrin case.

NEW ARBITRATION FEES AT DULUTH

By a recent vote of members of the Duluth Board of Trade, the personnel of the Board of Appeals has been increased to from three to five members. The fees for arbitrations under the Board's rules have been fixed as follows:—

For each case involving less than \$500.....	\$10
For each case involving \$500 and upward, and less than \$1,000	15
For each case involving \$1,000 or upward, and less than \$1,500	20
For each case involving \$1,500 or upward, and less than \$2,500	25
For each case involving \$2,500 or upward.....	50

The fees for controversies taken to the Board of Appeals are as follows:

For each case involving less than \$500	\$15
For each case involving \$500 and upward, and less than \$1,000	25
For each case involving \$1,000 or upward, and less than \$1,500	30
For each case involving \$1,500 or upward, and less than \$2,500	40
For each case involving \$2,500 or upward.....	75

When none of the parties to the controversy is a member of the Association the above fees shall be doubled.

The fees, as above, shall be paid to the secretary for the benefit of the members sitting as arbitrators, or members of the Board of Appeals, and, in addition, the Secretary shall be entitled to three dollars for each case submitted. In all cases submitted to either Board, the fees by the Board and Secretary shall be deposited with the secretary by the plaintiff before the case shall be entertained.

OPTIMISM AT BUFFALO

The past two weeks have seen the largest receipts of corn in this market since the crop commenced to move. In spite of the heavy movement prices have suffered very little and what little depression there has been has been in sympathy with the decline in Chicago futures and not by weakness in our local market. Drying facilities here have been worked to capacity but they have been adequate to keep up with receipts and as a result the corn has all been handled promptly and without any deterioration after arrival.

The movement is letting up and as the corn now in store is all excellent quality, the trades are looking for a good demand for it during the coming week when receipts from the country will be light on account of the progress of farm work.

Oats movement is light and there is a strong undertone to the spot market. Stocks in store are ample but are held mostly above current market for the better grades, which promise to become scarcer as the crop year draws to a close.

With Congress adjourned and the Government report behind us, there is a more optimistic feeling among the trade regarding prospects for the next few months and a much more active demand is confidently anticipated.—Recent letter from J. G. McKillen, Inc., Buffalo, N. Y.

MOVEMENT LIGHT IN INDIANA

Receipts of wheat have been light the last few weeks, although more than we really expected. There are a few small lots scattered around in our section, but we believe the most of the wheat which will be sold, has been delivered. We do not look for very much before next harvest. The demand has been very light and good prices only come from people who are wanting the wheat for immediate consumption. Apparently buying is being done from hand to mouth and according to the bids we receive, it looks like supply in millers' hands was very light.

Receipts of corn the last few days have slackened considerably, especially since the first of March. Prior to that time we have had as large a move-

ment as ever before for that month. For this reason the cash markets have been flooded with high moisture corn and has acted against the prices. We feel that stocks of corn now held in farmers' hands will not be sold unless we have considerable advance in the market. For this reason we do not look for a large movement until after the spring farm work.

Oats receipts have been very light and we believe most of them which will be sold has been moved from the farms and stocks now held will be used for seeding purposes. This situation seems to be firm at all the markets, but on account of the damage during harvest, the discounts for the lower grades are very heavy. This cereal is being ground and is making an animal feed which is becoming popular with all stockmen and dairy-men. We are not expecting many to move until the new crop.—Recent letter of Crabbs-Reynolds-Taylor Company, Crawfordsville, Ind.

NEW MEMBER OF WISCONSIN COMMISSION

After serving for 18 years as deputy state weighmaster at various Wisconsin terminal elevators, W. H. Scott was recently appointed to take the place on the Wisconsin Grain and Warehouse Commission made vacant by the resignation of the chairman, E. W. Feidler.

Mr. Scott was born in North Dakota in 1883



W. H. SCOTT

and resided in that state until he was 18 years of age. He has been connected with the grain trade ever since. In the appointment of Mr. Scott by Governor Zimmerman, the Commission not only gains a member with a long experience in grain affairs, but also one who is thoroughly conversant with conditions in Dakota, the source of so large a proportion of the grain handled by Wisconsin elevators. Mr. Scott should prove a most useful member of the Commission and the state is to be congratulated on his selection.

REPORTS ON LARGE TRADES NO LONGER REQUIRED

Dr. J. W. T. Duvel, chief of the grain futures administration of the Department of Agriculture, recently ruled that daily reports on individual accounts exceeding 500,000 bushels need no longer be made on the several markets operating under the Grain Futures Act.

On the New York market the announcement was received with considerable satisfaction by all members as the restriction in trading as a result of the former ruling was a severe handicap to New York traders as the wheat futures market is only seven months old.

As was to be expected, President B. H. Wunder, to whom the letter was addressed, said he had no comment to make other than to express the hope that the lifting of the rule would be helpful

in bringing about the results desired by the Department of Agriculture.

Dr. Duvel's letter stated that "this order is being issued with the reservation that its continuance is to be based on the absence of undue price fluctuations of such a character or size as to constitute an attempt at manipulation. This will place a heavier burden on the business conduct committees of the various exchanges, and I am sure your committee will be willing to assume this additional responsibility."

WHEAT CONDITIONS LOOK GOOD

Nat C. Murray, statistician for Clement, Curtis & Co., of Chicago, in regard to the prospects of the growing wheat crop, says:

The condition of Winter wheat in the last week of February averaged 86 per cent of normal, which is about the same as a year ago. The December 1 condition as reported by the Government was 81.8 per cent of normal, as compared with 82.6 in December 1, 1925, and a 10-year average of 84.4 on December 1. These comparisons would indicate that the crop started the winter season under slightly unfavorable conditions; but the winter so far has been favorable. March is usually a critical month.

The area sown, 41,807,000 acres, is 5 per cent larger than the previous crop. With average conditions after March 1 the crop may be expected to be approximately 570,000,000 bushels; more than this quantity if future conditions are more favorable than average; less than this amount if conditions be less favorable than average. Last year conditions after March 1 were more favorable than average.

Reports from the Spring wheat regions indicate a good sub-soil moisture condition. This is in marked contrast with a year ago, when early sub-soil moisture conditions were poor, giving the crop a poor start, from which it did not recover as the season advanced.

LOOKS FOR GOOD OATS DEMAND

Wheat: Growing wheat in this territory is beginning to green up some, due to the late rains and a little sunshine, crop generally looks good although the acreage is smaller than last year on account of the continued rains last fall. Movement of old wheat is light and some of it is very good, while a good portion is very poor and we still hear of the threshing of wheat. This of course will be poor quality, good for feed only. Now that the final report of reserves of wheat is out of the way we should get better markets as most everyone is aware that a fair proportion of the wheat now left is unfit for human food and it looks like stocks of milling wheat will be scarce before a new crop is raised.

Corn: Receipts have been heavy the past month and prices have declined considerably. Some of the corn has been good quality, but all of it has a high moisture content, but good enough for drying and storage purposes the most of it however, has been high moisture, high damaged and of a quality that must be used up quickly for industrial purposes. Farm reserves of corn are under the five-year average and we believe not burdensome, as feeding is heavy in most all parts of the country. The primary market visible however is rather large and presents a more difficult problem. However, as soon as the spring work begins on the farm, receipts will be rather light and this visible should be decreased as industries are running to full capacity, although feed manufacturers are not having the usual demand for their best products. This no doubt is caused in a great measure by the cheapness of the natural corn. Our market has kept pace with other markets as to price on good corn and has been as good as most markets on poor corn. This market is in position to take care of all kinds of corn as the industrial demand keeps up well.

Oats: Movement while not large, has been fair and steady, good oats selling at fairly high prices, while poor oats have been in good request, priced according to quality. Farm reserves are less than

the five-year average, but we believe are estimated too high as quite a lot of oats in several states have not as yet been threshed and the chances are that quite a few will never be threshed. We look for a brisk demand for oats before a new crop is raised—*Mueller Grain Company, Peoria, Ill., letter of March 10.*

ESTIMATES BY CROMWELL

R. O. Cromwell, statistician for Lamson Bros. & Co., of Chicago, estimated that on March 1 there was 39.3 per cent of the total corn crop still on the farms, 1,039,000,000 bushels, as against 1,330,000,000 or 45.6 per cent last year. About 17 per cent of the wheat remains or 141,000,000 bushels, and 32 per cent of the oats, or 401,000,000 bushels. About 85,000,000 bushels of wheat is estimated in country mills and elevators. This is the lowest farm oats reserve in 10 years. All of these estimates are more liberal than were made by other statisticians.

CINCINNATI MARKET GOOD

There has been a splendid demand in Cincinnati for off grade wheat. About one half to two thirds of the receipts during the past two weeks have been lower than No. 2 grade.

Corn receipts have not been burdensome, although they have been fully sufficient to run all the riders in this city to full capacity. In the last day or two, one of the local elevators has been embargoed on account of having too much corn on track. The balance are still open and are receiving all arrivals.

There has been a good demand for seed oats, and a fairly good demand for off grade. The market is in very good shape and could stand a right liberal movement.—*The Early & Daniel Company, Cincinnati, Ohio. Letter of March 10.*

CHICAGO EXCHANGE BUILDING TO START SOON

Henry A. Rumsey, chairman of the Chicago Board of Trade's new building committee, announces that building operations on the 41-story home for the world's largest grain exchange will begin as soon as the board's membership approves the plans. The architects' plan is that the building will harmonize with neighboring bank structures on La Salle Street, but there will be several structural features which will make it one of the outstanding buildings in Chicago's financial district. The cost is estimated at from \$8,000,000 to \$11,000,000, based on the plan submitted when the building permit was issued by the city.

CHANGES IN MEMBERSHIP

Buffalo.—New members on the Buffalo Corn Exchange are: George E. Pierce, and Clifford F. Lane.

Baltimore.—New members of the Baltimore Chamber of Commerce are: Wm. H. Gideon and E. Milton Berry.

Minneapolis.—P. H. Ginder now holds the membership of the late C. T. Mears in the Board of Trade. Reported by Secretary Charles F. MacDonald.

Chicago.—Memberships on the Board of Trade of the following have been transferred: C. H. P. Yallalee, J. Hardie Baldwin, Harry L. Winters, Harry L. Nixon, John A. Cavers, Estate Thomas S. Deeves, Estate George B. Quinn, Don B. Kilbourne, Peter E. Johnson, Frank R. Bacon and Harry L. Emmert. The following have been admitted to membership: Michael J. Meehan, Fontaine Martin, Sten A. Stenberg, Harry H. Field, James M. Sheldon, John Coleman, Jr., John J. Mitchell, Jule G. Smith, Jerome E. Steever, Henry F. Booth and Charles C. Davis. Reported by Secretary James J. Fones.

VOLUME OF GRAIN FUTURE TRADING IN FEBRUARY

The volume of future trading in grain on the Chicago Board of Trade in February was the smallest for any month in a long time, being only about 60 per cent of that in February last year. The total of all grains this year was 857,330,000 bushels, as against 930,949,000 in January and 1,

433,501,000 in February a year ago. The February trades were divided among the various grains as follows, for the purpose of comparison the January figures for each grain being given in parentheses: Wheat 493,444,000 bushels (598,502,000); corn 268,854,000 bushels (240,047,000); oats 65,277,000 bushels (52,897,000); rye 29,755,000 bushels (39,503,000).

The average open contracts for February, "short" side of contracts only, there being an equal volume open on the "long" side, were: Wheat, 87,976,000 bushels, as against 109,023,000 last year and 90,024,000 in January; corn, 77,933,000 bushels, compared with 54,717,000 last year and 68,526,000 in the preceding month; oats, 49,714,000 bushels, as against 53,666,000 a year ago and 48,960,000 in January; rye, 15,683,000 bushels, compared with 15,015,000 in February of last year and 13,468,000 in January 1927.

TERMINAL NOTES

Emmet G. Baker is now a partner in James E. Bennett & Co., of Chicago.

McKenna & Dickey, for many years active in the Chicago grain market, have been dissolved.

The F. Wendt Grain Company of Milwaukee, Wis., which has not been active since 1924 has been dissolved.

The Van Dusen-Harrington Company has bought the property and business of the Healy, Owen & Hartzell Company at Minneapolis, Minn.

W. H. Quinn is no longer associated with M. B. Jones & Co., Inc., grain and feed merchants of New York, N. Y., and is connected with the Armour Grain Company.

On April 1 the New York Produce Exchange will give a minstrel show, with 50 members taking active part. The last minstrel show of the Exchange was 20 years ago.

An appropriation of \$5,000 was voted by the Merchants Exchange of St. Louis, Mo., to help defray expenses of the committee opposing the bill for the exchange of bridges at St. Louis.

Robert McKee was elected president of the Vancouver Board of Trade for the coming year. He was vice-president of the board the last year and is engaged in the grain business at Vancouver.

A flour blending plant has been added to the elevator of the J. T. Gibbons company, grain and flour dealers on the New Orleans, La., market. The Gibbons firm has been in the market there for years.

A five-year lease has been signed by the Hutchinson Board of Trade, Hutchinson, Kan., on the present quarters of the Chamber of Commerce. The space will be ready for the Board of Trade about May 1.

At the regular monthly meeting of the Board of Directors of the Baltimore (Md.) Chamber of Commerce all of the grain and flour inspectors, grain samplers and weighers attached to the chamber were re-elected.

The Early & Daniel Company of Cincinnati, Ohio, has found it necessary to increase its office space and after April 1 will have its headquarters on the sixth floor of the Ingalls Building, Cincinnati.

The firm of Duhn & Co., Milwaukee, Wis., conducted by Francis Duhne, has been dissolved and Mr. Duhne has opened a new ground screenings department for the La Budde Feed & Grain Company.

The Northwestern Malt & Grain Company has been incorporated at 327 South La Salle Street, Chicago, Ill., capitalized at \$20,000. G. W. Hales, G. M. Merchant and Walter W. Hiss are interested in the new company.

Lowell Hoyt & Co., an Illinois commission firm, dealing in grain and seed, have been granted a charter to operate in Indiana with a total of \$10,000 of its capital stock represented in that state. Its headquarters will be at Indianapolis.

At the annual election of the Chicago Board of Trade Fellowship Club, Arthur Weinart was elected to the presidency; Willaim B. Fenton, vice-

president; Doc Bacon, secretary and treasurer. The directors of the club are: William Eaton, Connie O'Connor, John Hopkins, Clyde Perry, James O'Connell, Tony Otto, Neil Crowley and Harry Johnson.

The Hallet & Carey Company of Minneapolis and Duluth, Minn., is to be represented in South Dakota territory by Milo E. Coffey. Mr. Coffey formerly represented E. P. Bacon Company. His headquarters will be at Watertown, S. D.

Charles England, formerly president of the Baltimore Chamber of Commerce, has been re-elected chairman of the Arbitration Committee of the exchange for the ensuing year and Edward Netre, chairman of the Commission Rule Committee.

During 1926, a total of 51,208,000 bushels of grain was received on the Omaha Grain Exchange. Of this amount wheat constituted 21,723,800 bushels; corn, 19,980,000 bushels; oats, 7,830,000 bushels; rye, 1,009,400 bushels; barley, 644,000 bushels.

George F. Swenson, who was formerly registered for Adolph Kempner & Co., on the Chicago Board of Trade, is now registered for his own account, and Luther S. Dickey of New York, formerly registered for McKenna & Dickey, is also registered for his own account.

The Goetzmann-Aylsworth Company of Minneapolis, Minn., has been dissolved and the business discontinued. George A. Aylsworth expects to make other connections in the grain trade at Minneapolis and A. L. Goetzmann, the other member of the partnership, will retire.

New firms on the Chicago Board of Trade are: McKerr & O'Connor, with George J. McKerr and Jos. H. O'Connor, members; McKenna & Strasser, composed of Edw. P. McKenna and Christopher Strasser; and Nelson & Keeley with Paul A. Nelson and Walter F. Keeley, members.

The grain, feed and hay firm of W. F. McNeal Company of Baltimore, Md., has gone out of business. This change became necessary following the death of Walter F. MacNeal, proprietor. The affairs of the company are being closed by the administrator of the estate, George R. Gorsuch.

Edward C. Christl who was formerly with the Wisconsin Grain Elevator Company of Milwaukee, is now associated with the Froedtert Grain & Malt-ing Company of Minneapolis. Mr. Christl had charge of the departments purchasing and selling wheat, rye and barley, with the Wisconsin company.

The Paris, Ill., wire of the Frank H. Williams Grain Company, correspondent for James E. Bennett & Co., has been turned over to the Bennett company which is now in full charge. J. R. Crowden of Danville is at the head of the concern. Everett J. Hinds will continue as the company's operator.

For a third time, Louis W. DePass has been elected secretary of the Boston Grain & Flour Exchange. Other re-elections by the Board of Directors were: Frank W. Wise, treasurer; Dean K. Webster, trustee of the permanent fund for three years; and Caleb H. Jaquith, chairman; Edward H. Day and Warren G. Torrey, Finance Committee.

Edmund Thomas is now associated with the Lewis Grain Corporation of Buffalo, N. Y. He has for many years been connected with the Buffalo grain trade, for a time as president of the grain firm of Whitney & Gibson which is now being liquidated with the business to be wound up May 1. In his new position, Mr. Thomas will be in charge of the wheat department.

F. H. Hall is now associated with the Crowell Lumber & Grain Company of Omaha, Neb., in the merchandising department. Mr. Hall was formerly in the grain business at Des Moines but has discontinued that business to go with the Omaha firm. Mr. Hall was connected with the Crowell company before he went to Des Moines several years ago to engage in business for himself.

The private wire and commission business formerly conducted at Chicago, Ill., by J. J. Badenoch & Co., was discontinued March 5. The cash grain and feed business, which is the principal

part of the firm's business will be continued. The company is one of the oldest on the Board of Trade and has been identified with the feed and cash grain interests in the Chicago market for years. The private wire and commission business was an experiment which the company has now decided to abandon. All of the firm's outside offices will be closed.

By a judgment of the Appeal Court at Edmonton, Alta., another section of the Canadian Grain Act passed by the House of Commons in 1925 which lays down a specific form of contract for the purchase of grain by licensed dealers has been held *ultra vires* of the Parliament of Canada. The decision arose out of a damage action for non-delivery brought in the District Court, at Edmonton.

On March 7-8, the Dadmun-La Budde Company of North Milwaukee, Wis., jobber and dealer in grain, flour, feed etc., entertained the farmers of that vicinity at its warehouses and elevator at a farmers institute under the direction of the College of Agriculture, University of Wisconsin. One of the principal speakers was Dr. O. B. Kent, formerly of Cornell University, and now poultry feed expert with the Quaker Oats Company.

The following amendment to Rule 11, Section 7, of the rules governing the Milwaukee Chamber of Commerce has been adopted: "All contracts for the purchase or sale of barley in this market, unless otherwise specified, shall be understood to be for No. 1 at 2 cents per bushel over contract price; Special No. 2 at contract price; No. 2 at a discount of 3 cents, or No. 3 at a discount of 8 cents per bushel under contract price."

TRADE NOTES

Articles of incorporation have been filed by S. T. Edwards & Co., well known feed engineers and feed analysts of Chicago, Ill., capitalized at \$25,000. The business has been conducted for years by S. T. Edwards, and the incorporators as named are S. T. Edwards, Ernest S. Scott and G. F. Grantvedt. Mr. Edwards will be president of the new corporation; Mr. Scott, vice-president; and G. F. Grantvedt, secretary-treasurer.

The O. W. Randolph Company of Toledo, Ohio, reports that some of the companies which have purchased their driers have had them in operation continuously since early in the fall and that in many cases very large profits have accrued to the owners through this operation. Great quantities of damp corn and oats have been marketed and without the driers they could not have been handled except at great loss to all concerned.

Of interest to its many friends in the South, and more particularly in the State of Alabama, should be the announcement of Link-Belt Company, of Chicago, Philadelphia and Indianapolis, which states that this company will open a new branch sales office at 229 Brown-Marx Building, Birmingham, Ala., on March 6. W. H. Norton, for many years connected with the company's Chicago sales department, will assume the managership of the new territory.

W. R. Sinks, manager of the grain elevator department of James Stewart & Co., Inc., 1210 Fisher Building, Chicago, has recently returned from a month's stay in Florida. During this period he covered over 5,000 miles by automobile, and reports having had excellent roads and favorable conditions all along the way. He visited all parts of Florida and says that he not only had a most enjoyable time, but had some of the best fishing of his experience. He is now back in the city directing the affairs of the Stewart company, fully prepared for the rigors of a busy spring season.

George A. Chapman of the Riverdale Products Company, 208 S. La Salle Street, Chicago, reports that sales of tankage are holding up well. Chapman's Red Top Tankage is proving to be a profitable sideline for many elevators. For one reason, the low price of grain at the present time has

forced farmers, who would ordinarily sell their grain and use prepared feeds for their hogs or chickens, to feed the grain they have, grinding it themselves or having it ground at the nearest mill or elevator. This leaves a deficiency in the ration which tankage, meat scraps and bone meal go far to supply. Many elevators have worked up a steady business in these products.

MINNESOTA VS. IDAHO

Arbitration Committee No. 6, of the Grain Dealers National Association has decided in favor of the plaintiff in the case of the McCaull-Dinsmore Company, Minneapolis, Minn., organized the Mikelson Grain Company, Lewiston, Idaho. The controversy involved the sale of No. 1 Dark Hard Winter wheat for shipment to Chicago. The defendant failed to deliver, and authorized the Minneapolis house to buy in to cover. This was done at \$1.82 per bushel, and the arbitrators awarded the difference between that price and \$1.59, the contract price, to the plaintiff.

A LONG RECORD

53 YEARS AT SAME JOB IN SAME ROOM; STILL ENTHUSIASTIC

Silver Creek, March 10—To George O'Connor belongs the unique experience of having worked 53 years today in the same room of the same shop at the same job, in the S. Howes Company shop, making brushes for grain cleaning machinery. He is in good health and is as enthusiastic about his job as he was when he began work.

The above was clipped from the March 11 issue of the Buffalo *Courier-Express*.

It was just three years ago that George O'Connor was the honor guest at a testimonial banquet given at the home of A. C. Barbeau, president of S. Howes Co., Inc. George had then been 50 years in the employ of the builders of "Eureka-Invincible" Grain Cleaning Machinery. Surrounded by the officers of the company, office staff of the company, heads of departments and foremen and lauded by one and all, that surely was a red letter day in the life of George O'Connor.

ADVERTISING BY TELEPHONE

The first advertisement sent by wireless telephone from this country to England appeared in the *Daily Telegraph* of London on January 10. The advertisement was a three column spread of *The Sun* of New York, and the text of the ad was telephoned by William H. Rankin, head of the advertising firm of William H. Rankin Company of New York.

The advertisement created quite a sensation in London and the *Telegraph* printed nearly a column on its front page telling of this pioneer experiment in international advertising. Mr. Rankin conceived the idea and carried it to its successful conclusion, and has been the recipient of many congratulations from both sides of the Atlantic.

AN AUTHORITY ON TRANSMISSION

In these days of keen competition when it is sometimes the "survival of the fittest," it is refreshing to meet a sales organization that has for its slogan "Never sell anything you would not buy." Such an organization is the office of Earl C. Moss, authority on rope and chain transmission, and Chicago representative of Morse Chain Company since 1906 at 112 W. Adams St., one of the pioneer transmission engineers in Chicago.

Mr. Moss was born at Chicago and has lived there all his life. After attending grade and high schools, he graduated from the Chicago Manual Training School and prepared for Cornell University. However, an opportunity to become connected with the Thompson-Houston Electric Company came his way, and he abandoned further classical pursuits in favor of securing a practical foundation for his life work of engineering. After a year with the electrical concern he joined the Union Switch & Signal Company and was put in charge of

its exhibit at the Chicago World's Fair in 1893. His work attracted the attention of the Dodge Manufacturing Company and he went to that company as sales engineer in charge of construction, in which position he remained for 13 years.

In 1906 Mr. Moss became the Middle West representative of the Morse Chain Company and has served continuously ever since. He has had the distinction of having designed and sold both the largest and the smallest chain drives in the world. The former was 5,000 horsepower and was used in hydro-electric work at Snake River, Idaho, and the latter was 1/40 horsepower and was used in a special sewing machine head. Always eager to solve new problems in transmission, Mr. Moss has established more than a local reputation in the branch of engineering, and is often called for consultation by grain elevators, flour mills, paper mills, rubber mills, and steel mill engineers who find their transmission problems difficult.

During the World War Mr. Moss made a notable engineering contribution, one that attracted the notice of European engineers. Under the direction of Peters Cartridge Company he designed and erected a shot tower at Marseilles, France, his plans becoming standard for similar structures under allied command.

Mr. Moss is a member of the Western Society



EARL C. MOSS

of Engineers, the Illinois Athletic Club and other organizations. He is active in social and fraternal work and the father of three sons, who, with his wife, comprise the interesting Moss family.

SUPREME COURT ACTS ON \$100,000 GRAIN CLAIM CASE

The United States Supreme Court, on February 21, denied a petition for a writ of *certiorari* to the United States Court of Appeals in connection with the case of the Pennsylvania Railroad Company *versus* William H. Muller & Co., Inc. The railroad sought a review of the decision of the appellate judge who affirmed the judgment for a Maryland district court, according to which the Muller company was awarded compensation for damages claimed to have been sustained in a grain shipment, in the amount of \$119,206.64.

The Pennsylvania admitted in its petition that the damages were ascribable to its failure to transport the Muller grain within the time specified by contract.

A VOLUNTARY petition in bankruptcy has been filed by Samuel Freedman, feed dealer of Buffalo, N. Y. His liabilities are \$19,880 and assets, \$20,634.

Hints for the Elevator Millwright

"Big Bill" Davis Tells Something About Preparing Feeds and How One Elevator Company Capitalized on This Sideline

By JAMES F. HOBART

"THE New Way Elevator Company intends to put out the most extensive line of feed for chickens, hogs and other animals that has ever been attempted," said "Big Bill" Davis. "You have noticed, of course, that a lot of new machines are being installed in the elevator and that a number of sheds and small buildings are being constructed upon the 200 acres of land adjacent to the New Way Elevator."

"Yes, and from the machinery installed, it looks as though chicken feed and similar products were to be manufactured on a large scale," replied his listener, "but what are the sheds and buildings for?"

"Chicken houses and hog pens," answered Davis. "For many months the New Way company has been working on chicken feed formulas and they have several good ones ready to be tried out. They have had the best chemists working upon chicken feed and the materials to be used. Did you know that this company had its chemists dissolve an entire chicken in acid and then analyze the resulting solution in order to determine just what chemicals are required for the growth of fowls?"

"They found out a whole lot and their chemists are preparing to do the same thing with whole hogs that they did with chickens. A big pile of money is being invested here but it does not all belong to the New Way Elevator Company. It has made a contract with two large concerns that are respectively to handle the hog and hen industries. These concerns are to raise hens and hogs commercially on a large scale, and to experiment with and use the foods and feeds put out by the New Way company. There are to be scores of chicken runs in which large flocks will be grown for the market and each one of these separate runs is to be fed along the lines of well thought out experiments with a certain chicken feed. In this way the product of the New Way company will be tested out from beginning to end, deficiencies or weaknesses will be found and corrected, and each kind of food thus brought to the highest state of perfection possible.

"Large commercial 'hen parks', each containing hundreds of fowls will be devoted entirely to single experiments for developing a single line of feed. For instance, one big unit will turn out nothing but pullets for future egg production, another unit will be devoted to transforming young roosters into broilers, other large units will be devoted to egg production, capons, market poultry and other lines.

"To secure the results needed, the New Way company is investigating every chicken feed requirement, and it is also diligently seeking ways and means of combining the ingredients and storing and using the resulting chicken feeds. The New Way company will also seek to produce the best scratch feed possible; every kernel of grain contained in it will be selected for the work the feed is to accomplish. Each kernel of corn contained in scratch feed will be 'cut' neatly and not mangled by crushing. Furthermore, the cut grains will be separated from those not presenting perfectly smooth cleavage; and such cut grains will be 'tumbled' to render them smooth and to prevent molding. The new scratch feed will be well dried before being sent out of the elevator.

"In addition to the large number of things already described, the New Way company has contracted with the second concern, which will attend to the growth of hogs in a similar manner. Not only will the New Way company perfect and manufacture hog food for all purposes, but it will soon give attention to feed for other animals—horses, cattle and sheep to receive attention in due time. In addition, the New Way people intend to manufacture and place on sale in all parts of the country such feeds as may be required in each locality. The New Way company will also give special attention to the manufacture of feeds which are exactly true

to specification. They will not tolerate over-running or under-running of any ingredient called for by the formulas. The user may always be sure that each of the products is true to specifications and is not lacking in any ingredient which should be contained."

Mr. Davis went on to say that it has been found that scratch feed increases the number of eggs hens will lay. This feed is made up with about every kind of grain obtainable. Very little rye is used, however, because of its laxative effect. Hen workers tell us that a hen sitting or standing around all day will lay very few eggs. The more exercise a hen gets, within limits, of course, the more eggs she will produce. We are told that the reason for this is because the hen is so built that the blood vessels which supply the legs branch off at a point close to the back of the fowl, close to where the egg producing ovaries are located. They tell us that when a hen walks or runs more blood flows to the legs and that the blood in passing the egg ovaries incites them to greater activity; hence, to the production of more eggs. He continued:

"They put in a large number of different kinds of grain in a feed of this sort for a very good reason. The first time a hen scratches through the litter she picks out only that kind of grain she likes best. Later, wishing a little more food, the hen will scratch through the litter again, this time picking out second choice of grain. In this way the hen is made to dig through the litter a considerable number of times. If only one kind of grain were used the hen would scratch through the litter until her appetite was appeased; then, she would probably 'stand on the side lines doing nothing.'

"Those two long wire cylinders which are being set up in one of the sheds, nearly eight feet in diameter and 100 feet long," continued Mr. Davis, "are used for exercise. At certain predetermined times each day hens are made to pass leisurely into one of the big wire cylinders. They cannot get out because the other end of the cylinder is temporarily closed by wire netting. When a sufficient number of hens have made their way into a cylinder, the entrance end is closed by a similar wire fence. The hens wander about, distributing themselves more or less evenly along the length of the cylinder and as far up the concave sides as they are able to climb without sliding back again.

"After a short time has passed the big cylinder begins to revolve imperceptibly, so very slow is its motion. The fowls are not alarmed and scarcely notice the motion, but soon begin to move forward in a direction from which the cylinder is moving. The motion of the cylinder gradually increases in speed, but very slowly so that not a single hen is frightened in the least. Pretty soon the hens are moving at a brisk walk. Then as the cylinder's speed still further increases, the hens begin to run and for several minutes they are kept going at a brisk pace and are getting far more exercise in a 10-minute period than they could ever hope to obtain in 10 hours of chasing scratch feed. Such a device is used voluntarily by tame squirrels for obtaining necessary exercise and there seems to be no reason why a similar power device, well handled, should not go far toward limbering up the egg producing apparatus of able bodied hens.

"The hens don't stay there all day but they may have two or three periods in the big cylinder during the 24 hours. When the exercising period is over, the end screen is removed from the cylinder and the hens begin to walk out even before the cylinder comes to a rest. From the cylinder they pass where certain kinds of mash are displayed together with lime stone grit, water, buttermilk and such other hen delicacies as predetermined experiments may call for. Just where and how far a flock of hens may travel in this scratch feed eliminating layout I am not prepared to say and in all probability its working out calls for a great deal of

study and experiment. It is quite likely that when the hen exerciser and electric day lengthener are in full operation the hen's yearly record for eggs produced will be boosted up to mighty close to the 360 mark.

They intend to make feed which will be climate and travel proof, even when shipped to polar or tropical regions.

ILLINOIS ELEVATOR HAS GROWING BUSINESS

High standards in construction apply generally, and the small or medium sized plant is just as desirous of availing itself of modern features as is its large competitor. The necessity for this arises not only out of close competition, but equally as much as a result of the economies involved. The actual expense of erecting an up-to-date elevator is not sufficiently greater than the case of an inferior one to offset the advantage gained in cheaper operation, saving in insurance and similar considerations. An excellent example of the mod-



FARMERS GRAIN & COAL COMPANY'S ELEVATOR, FLANAGAN, ILL.

ern type of country elevator in the Middle West will be found in the house belonging to the Farmers Grain & Coal Company.

This company's elevator occupies, at Flanagan, Ill., a ground area measuring 39 feet by 39 feet and it is 108 feet in height. It is situated along the right of way of the Illinois Central Railroad; and the manager of the business is L. H. Lanneman.

The elevator is a concrete structure, built by the Reliance Construction Company. It has storage capacity for 80,000 bushels of grain, and this is distributed among eight tanks and 13 bins, concrete walls separating the various units. The receiving capacity of the house is 10,000 bushels, and the shipping capacity is also 10,000 bushels.

For lighting and part power, kerosene is used. The engine is a 25-horsepower Type "Y" unit, which was furnished by Fairbanks, Morse & Co. The plant is also equipped with a 1-horsepower Fairbanks Motor. Rope and belt are used for drives, 500 feet of belt being required, and 450 feet of rope. An automatic scale has been provided. For fire protection there are chemical extinguishers and the plant has a minimum fire hazard.

The Farmers Grain & Coal Company was incorporated in February 1908. The company's old wooden structure was replaced by a new concrete elevator in 1918. The concern has been conducting a profitable business ever since. The principal grains handled are corn, oats and wheat, and during the course of a year approximately 520,000 bushels of grain are handled. Coal constitutes an important sideline of this elevator.

NEWS LETTERS

KANSAS CITY

B. S. BROWN - CORRESPONDENT

THE Shippers Conference Committee, appointed at the suggestion of the Interstate Commerce Commission after the conference of shippers and carriers held before the examiners of the Commission here on January 20, held a conference of shippers at the Athletic Club on February 24. With Clyde M. Reed as chairman, the shippers discussed problems which will come up with the examination of rates, in an attempt to arrive at some basis for action. A large number of shippers representing all parts of the Southwest territory attended the meeting, offering for consideration problems of particular localities, to make up a part of the shippers' evidence at the investigation of rates on grain and grain products which will start at either Fort Worth or Dallas on May 12. According to Mr. Reed, the coming rate investigation is by all odds the most comprehensive and involved which has ever been attempted. All those attending the conference were opposed to a rate structure based on a straight mileage basis. One of the important acts of the meeting was the adopting of a resolution which read, "It is the sense of the conference that we favor a uniform basis of rates for the States of Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Kansas, Oklahoma, Arkansas, Louisiana, and the Texas common point territory." Some objection was made to the inclusion of Nebraska, the Dakotas, and Minnesota in this list, but this objection was overruled by the general sentiment. It was expressed as the belief of the meeting that a general revision of the rate structure could not be made without an investigation of all rates.

Opinions were expressed freely through the one-day meeting; these expressions, however, being understood not to have any binding effect either on the Shippers Conference Committee, or on the Interstate Commerce Commission in their actions. At the close of the conference it was requested that the Southwest grain markets, including primary and secondary markets in Missouri, Kansas, Oklahoma, Arkansas and Texas, form a committee to work out any differences among themselves, and that the millers form a similar committee. On February 23, the day before the general conference, the Shippers Conference Committee held a meeting in the office of Clyde M. Reed, the important feature of this meeting being the adoption of a resolution against any charge for the granting of transit privileges, since transit in this territory has never involved an extra charge. The committee is composed of the following members: Mr. Reed, chairman; H. M. Hancock, Chamber of Commerce, Salina, Kan.; G. H. Work, Colorado Mill & Elevator Company, Denver; Edward P. Byars, Fort Worth Traffic Bureau; H. D. Driscoll, Cotton Exchange, Oklahoma City; Charles Rippin, traffic commissioner of Merchants Exchange, St. Louis; G. G. Moffitt, Southwestern Millers Club, Wichita. Preceding the hearing before the Interstate Commerce Commission examiners in Dallas or Fort Worth, there will be a meeting of this committee to make recommendations to the examiners from information gained through the work of the various committees.

Southwestern millers were favored by the decision of the Interstate Commerce Commission to refuse the 6-cent reduction in grain rates from Minneapolis to points on the eastern coast. With a 4½-cent differential already existent between the Northwest and Kansas City, the proposed reduction would have put the Kansas City territory at a disadvantage of 10½ cents with their competing territory. The Commission took into consideration in its decision the fact that although Kansas City and other markets in this district compete with the northwestern millers, they draw their grain from sources other than the affected territory, and that a reduction of 6 cents in the rates would probably be reflected in the delivery prices of northwestern flour in eastern markets, making the competition much more unfavorable for the Southwest than that under which they are now operating.

With the completion within the next few months of the increased grain storage facilities of the Washburn-Crosby Mill here, Kansas City will have the second largest grain storage supplying an individual

flour mill. The increase will amount to 1,500,000 bushels, making the total grain storage 4,000,000. This is second only to the company's Frontier Elevator at Buffalo, N. Y., which has a storage capacity of 5,200,000 bushels. The addition will be completed in time for the new crop.

Word was received here of the death in Long Beach, Calif., of Herman Probst, veteran grain man of Kansas, who for many years was in the business at Arkansas City, Kan. Mr. Probst died on February 22, at the age of 67. He was a member of the Kansas City Board of Trade in 1914 and 1915. He retired from his business in Arkansas City about five years ago.

Wilton D. Grant, for many years a grain broker with offices in the Board of Trade, and one of the oldest members of the Board, died here on February 21. Mr. Grant was 70 years old, and had been ill for several months, being stricken with a heart attack on Armistice Day. Mr. Grant became a member of the Kansas City Board in 1892. Burial was in Kansas City.

Word has been received here that a Russian will be in attendance at the International Wheat Pool Conference to be held here on May 5, 6, 7. This information was sent by the All-Russian Central Union of Consumers Co-operation Societies at Moscow, the name of the representative being Alexander Kykov.

The committees of the Board of Trade here have been named. The following were appointed: Appeals Committee: L. A. Fuller, chairman, H. C. Gamage, H. J. Smith, B. L. Hargis, and Thad Hoffman. Arbitration Committee: E. F. Emmons, Algrid Huttig, E. R. Jessen, W. H. Marshall, Wm. J. McNeil. Bond and Insurance Committee: W. W. Marshall, chairman, Glenn F. Hitts, W. B. Lincoln. Building: E. O. Bragg, chairman, James Russell, W. C. Goffe, Allen Logan, John Fennelly. Business Conduct: C. W. Lonsdale, chairman, J. E. Rahm, B. C. Moore, C. M. Hardenbergh, L. S. Mohr. Cash Margin: E. R. Stripp, chairman, E. E. Klecan, C. F. Aylsworth.

MINNEAPOLIS

ALBERT W. MORSE - CORRESPONDENT

THE Minneapolis Grain Commission Merchants Association, on February 17 were hosts to elevator representatives attending the twentieth annual convention of the Farmers Elevator Association of Minnesota. It was at the Nicollet Hotel, and the attendance has been estimated at over 700 persons. It was while addressing this group that John F. Gustafson, president of the Farmers Elevator Association of Minnesota, suddenly died.

During the past two or three weeks the grain arriving in Minneapolis has been of much better quality than in the period just previous to that time. There was not as much moisture or sprout damage.

The question of moisture content in flax is liable to come up at the next meeting of the State Board of Grain Appeals. This will probably be some time in June or in July, the customary meeting date.

David D. Tenney, president of The Tenney Company, grain commission, 59 Chamber of Commerce, at the request of the Farmers Grain Dealers Association of North Dakota, addressed their annual convention, held in Minot, March 1, 2 and 3. Mr. Tenney spoke on the effects of the then-proposed McNary-Haugen Bill.

R. C. Miller, in charge of the Minneapolis district of Federal grain inspection, as secretary of the Twin City Federal Business Association, is a member of the Executive Committee of that organization, which met March 8 to outline plans for the conduct of the Association during the remainder of their fiscal year, which ends December 31. This organization has over 300 members, men in charge of Federal departmental activities in the Twin Cities, and their principal assistants. Regular meetings are held in January, April, July and October, and the Executive Committee

meets alone in the other eight months. The objects of the Association are to secure more efficient and more economical departmental operation, and to release information which the public should have. The Twin City association is part of a national organization.

The decision handed down Tuesday, March 8, by the Interstate Commerce Commission, in which they refused to readjust grain rates between North Dakota, Minnesota and other points, did considerable to maintain the standing of Minneapolis as a market. The proposed readjustments largely made increases in rates from North Dakota points to Minneapolis and Duluth. There is a great deal of territory north and west of Minneapolis, from which the rates to Minneapolis and to Duluth are the same, and if this decision had been reversed it would have been to the detriment of Minneapolis in a number of important instances. By putting the rates on a mileage basis, the parity of rates to Minneapolis and to Duluth would have been destroyed. The feeling of the members of the Chamber of Commerce of Minneapolis is that they do not want an edge over other markets, that they want a chance for fair competition. In commenting upon the decision of the Interstate Commerce Commission, Lee Kuempe, of the Minneapolis Traffic Association, said, "The permanency of this rate parity on shipments to Minneapolis and Duluth will permit the keenest of competition between these two markets, and is very desirable for the producers and the shippers of grain."

In order to facilitate the financing of seeding operations in Montana, North Dakota and South Dakota, and to alleviate the burden which is thrown back upon the farmers of these states through the failure of Congress to appropriate money for seed loans, the First National Bank, Minneapolis Trust Company, Northwestern National Bank and Minnesota Loan & Trust Company, all of Minneapolis, have formulated plans by which they will offer to buy the counties' warrants, bearing 5 per cent interest, and give the counties the option of paying any or all of the warrants at any time on 15 days' notice. Immediate action was necessary, in view of the fact that the South Dakota law makes it necessary for farmers desiring such assistance to petition their county commissioners by March 15 to take steps to secure seed and feed for them. In North Dakota a man wishing to secure this aid must have filed with the county auditor before March 10 an application explaining his purpose, and the county commissioners must be petitioned by March 25. In South Dakota a 10-day delay will be caused by a provision that warrants and bonds must be advertised for sale 10 days before they can be purchased. This concerted action by the banks is designed to prevent a recurrence of the confusion and possible mistakes made in 1919.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

TOWARD the end of February, the floor of the New York Produce Exchange was the scene of one of those pleasing little affairs which do so much to brighten the dull routine of everyday business life. The central figure in this function was Walter Moore, the active and popular freight broker. His many friends, discovering that February 24 was the thirty-seventh anniversary of his wedding, subscribed for a large basket of handsome roses, which was presented with the usual complimentary and congratulatory remarks, by Joseph A. Abel of the Abel-Whitman Company, grain and feed merchants. Mr. Moore, of course, was deeply touched by this display of friendship and affection, but nevertheless, he was able to respond in a fitting manner.

Carl A. Lund, associated with J. W. H. Hamilton, Inc., grain exporters, has been elected to membership in the New York Produce Exchange.

Joseph M. Nugent of Knight & Co., and Charles B. Crofton of Crofton & Co., both well known and popular members of the local grain trade, returned recently to their posts on the Exchange floor after

an absence of three weeks which was spent at Havana and Palm Beach, and received a cordial welcome from their many friends. It was quite evident that they had derived great benefit from their vacation.

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According to a notice posted on the Produce Exchange bulletin boards, Spillers' Grain Company, Ltd., has changed its name to Spillers Milling & Associated Industries, Ltd. They will still be represented on the floor by E. S. Galloway and George B. Schold.

* * *

Harry B. Watson, for many years a well known member of the grain trade on the New York Produce Exchange, is now associated with the local office of the Armour Grain Company.

* * *

Paul H. Hemelryk of Hornby, Hemelryk & Co., large cotton and produce brokers of Liverpool, has been elected to membership in the New York Produce Exchange.

* * *

W. H. Quain, formerly associated with M. B. Jones & Co., Inc., export and domestic grain, has severed that connection and taken a position with the Armour Grain Company on the Produce Exchange.

* * *

William J. P. Griffin, broker, was among the applicants elected to membership in the New York Produce Exchange at the March meeting of the Board of Managers.

* * *

According to an announcement on the bulletin boards of the New York Produce Exchange, O. Atkinson is no longer connected with the local office of Lamson Bros. & Co., prominent commission merchants on the Chicago Board of Trade.

* * *

There has been a great deal of talk and newspaper comment lately regarding the alleged subsidence of the notorious "crime wave" in New York. However, it would be impossible to secure emphatic confirmation from Thomas M. Blake, a well known member of the grain trade on the Produce Exchange. About the middle of February his apartment was burglarized and jewelry of considerable value stolen.

* * *

Trading in tickets of membership in the New York Produce Exchange continued extremely quiet during the past month, but it is impossible to confirm rumors of sales at lower prices. Some holders of "regular" tickets still quote them at \$2,500, and assert there is some inquiry at slightly less. Associate memberships are also nominally unchanged at \$1,600.

* * *

George Jaris, grain and flour exporter, has been elected to membership in the New York Produce Exchange.

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Preparations are being vigorously rushed for the First Minstrel Show of the New York Produce Exchange, which is to be held on April 1 at the Waldorf-Astoria Hotel. The committee in charge report gratifying progress all along the line and are enthusiastic in the opinion that all who attend will have a thoroughly enjoyable time. The box seats and tickets have been practically all sold and it is expected that the audience will number between 1,300 and 1,400, including many out-of-town members of the grain trade and other lines of business who are eager, no doubt, to see their New York friends "do their stuff." The musical program will include two solos and 11 songs, the individual "stars" being: Leonard C. Isbister, grain broker; Clifford B. Merritt of Bowring & Co., steamship agents and commission merchants; Joseph M. Nugent, grain broker with Knight & Co.; Charles B. Crofton of Crofton & Co., grain merchants; Hugh A. Duffy of H. A. Duffy, Inc., freight brokers; George M. Bress of Funch, Edye & Co., Inc., ship brokers; Joseph A. Abel of the Abel-Whitman Company, Inc., grain and feed merchants; Thomas W. Kane, vice-president and manager of the Long Dock Company. Dancing will follow the show, the music being furnished by the Meyer Davis Orchestra under the personal direction of Joe Moss, whose fame has been broadcast to radio audiences all over the country. The large and enthusiastic chorus are rehearsing diligently twice a week, and at this writing have just been measured for their costumes.

* * *

John O. James, grain freight agent of the New York Central Railroad Company, has been elected to membership in the New York Produce Exchange.

* * *

The New York Produce Exchange bowling team lost the second "leg" on the trophy for which they are competing against the Maritime Exchange. The second match was rolled on March 7 and the "Maritimes" did some astonishingly good bowling, making scores of 969 and 965. Some of the Produce Exchange boys seemingly were suffering from "stage fright" and the team totals were only 745 and 763. This was a decidedly disappointing showing to the many members who have taken an active interest in bowling, as some really good work has been done on the regular club nights. On two successive nights Harry Gere averaged 176 and 209, with high scores

of 215 and 235. "Robby" Straub averaged 179 and 205, with "clean" gains of 205 and 215. "Joe" Hook averaged 184 and 187. Other good averages were: Abel, 174; Burke, 183; Colesworthy, 171; Connors, 173; Frey, 182; Friedrichs, 176; Kenyon, 174; Rasmus and Readdie, 178; Seale and Therrien, 174.

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Members of the New York Produce Exchange and especially those in the grain trade, were greatly shocked recently to learn of the sudden death of John H. Flahive, head of the grain exporting firm of Flahive & Co., aged 49 years. About two years he had been in poor health, but lately his condition had improved to such an extent that he was able to attend to business as usual. He had gone to Havana with his wife, daughter and son for a short vacation and became ill in that city, suffering a stroke which caused his death in about 36 hours. Mr. Flahive was born in Brooklyn in 1878 and started in business as a boy with the West Shore Railroad Company. In 1898 he made his start in the grain trade, being identified first with the old firm of Otto E. Lohrke & Co. and then with H. T. Kneeland & Co. Still later he was identified with Edward Beatty and following Mr. Beatty's death he became a partner in the firm of McWatty & Flahive, which was succeeded by Flahive & Co. His intimate friends described Mr. Flahive as one of the most popular men ever to be identified with the grain trade. He was not only highly honored for his upright business principles, but in addition he had a great many friends because of his bright and witty personality, reflecting a persistently optimistic spirit.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE most favorable month for grain trade for a long time was reported in the compilation of receipts by Secretary Harry A. Plumb of the Chamber of Commerce for February. As a rule two or three of the grains have shown increases in receipts each month, but February was a decided exception when all five of the leading grains handled showed a gain in receipts over the corresponding month a year ago. The big item in the Milwaukee grain trade right now is corn, supply of which makes a total which is almost as large as all the rest of the grains put together. The supply at the local market for last month was 1,800,000 bushels as compared with receipts of only 1,270,000 bushels for the corresponding month of last year.

Grain dealers assert that farmers are now able to see that grain prices will not rally much for the rest of this season, hence there is nothing to do but let go of grain. In other springs, they say, it has paid the farmers to hold their grain for the fag end of the season, but this time it did not.

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Harry Stratton, one of the leading grain men of the Milwaukee market, has gone to New York City for a stay of about 10 days. He was accompanied by his wife.

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In general the sentiment at Milwaukee among grain men was one of satisfaction in the vetoing of the McNary-Haugen Bill. The people in the grain business in general were opposed to this bill," said Secretary Harry A. Plumb, "because it was unworkable and in general it was unsound in its conception. The reaction upon the farmers would have been devastating in its effect. The Wisconsin farmers might have suffered by much higher prices for feed."

Edward Nordman, the state commissioner of marketing, who has been an ardent champion of everything that could be done to aid the farmer, said that President Coolidge performed a distinct service in killing off this scheme. He declared that if the bill had operated to create better prices for the few crops chosen, it would surely in turn have increased production in the same fields and in that way it would have defeated its own purpose.

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The Wisconsin assembly has decided to protest against the establishment of Federal grain testing bureaus on the ground that the state Grain Commission would thereby become ineffective. By unanimous resolution the assembly joined with the senate in asking Congress not to establish the testing stations which would determine protein and fat values in grains.

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The next grain show of the Wisconsin Experiment Association will be held in Antigo in November, according to announcement by the officials of the group. This is the leading grain show of the state and arouses wide interest among the rank and file of farmers.

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Milwaukee flour stocks are still at a very low point with only about 3,100 barrels at the opening of the month as compared with a total of 3,800 barrels a

month ago. One year ago the flour stock was over 10,000 barrels, two years ago it was approximately 7,600 barrels, and three years ago the aggregate was almost 14,000 barrels. The present figures for the opening of March are the lowest for many years. Flour handlers report that there is no disposition of the consuming trade to stock up, as there is no bullish market for wheat in sight at the present time.

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Very large grain holdings are expected at Milwaukee before the opening of navigation, judging by the way the stocks of grain are piling up here week by week. The wheat supply here is 117,000 bushels in elevators and 151,000 bushels in boats. The total corn holdings are 1,979,000 bushels in the elevators and 1,203,000 bushels stored on ships. The oats holdings are 1,634,000 bushels in elevators and 567,000 bushels on boats. The barley in storage is light with only 207,000 bushels due to relatively small receipts in this field. The rye holdings are even soaring up near the 1,000,000 bushel mark with 305,000 bushels in elevators and 519,000 bushels in boats.

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Vessel men in some instances are predicting an early opening of navigation due to the exceptionally warm spring which has prevailed. This would mean a rapid loosening up of the grain trade if early shipments to the east are made possible.

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Dispatches received at the Milwaukee Chamber of Commerce indicate that the farmers in South Dakota have started their early wheat seeding. However, it has been reported in some cases that seeding in the Northwest has been known to start in February, so that the record for 1927 is not likely to be exceptional.

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J. L. Bowlus, traffic manager of the Milwaukee Chamber of Commerce, has gone to St. Louis to attend what he says is a very important rate conference. At this time traffic experts will assemble from all the markets, he adds, and the ground will be set for ironing out all of the moot questions in the rate problems concerning grain. This conference is merely a prelude to the revision of all grain rates in the Northwest, designed to get an agreement on broad, general policies.

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A very important addition to the traffic facilities of Milwaukee was made when the *Madison*, a new Grand Trunk car ferry, sailed for its first cargo trip. The *Madison* will ply between Milwaukee and Grand Haven, Minn. Following an inspection of the vessel, a luncheon party was held on the boat with H. W. Ploss, general agent of the Grand Trunk line, as the host.

This vessel will help to give Milwaukee excellent car ferry service so that shipments from the West can pass across the lake to the east with the minimum of delay. This traffic is growing so much heavier daily that it was found imperative to add more vessels. Still further additions are contemplated in the future as the rapid growth of the traffic warrants.

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Despite the current reports that farmers are getting about 16 per cent less for their goods than a year ago, the bad showing does not hold good in grain prices. The No. 2 barley is being moved daily in the Milwaukee market around 78 to 84 cents a bushel, as compared with a selling price a year ago for the same date of 68 to 74 cents a bushel. The No. 3 White oats has been selling at 46 to 47 cents a bushel while the corresponding price a year ago for the same grade was 39 to 40 cents. The No. 2 rye is selling in Milwaukee at \$1.04 to \$1.05 while the same grade of rye sold a year ago for 86 to 87 cents per bushel. Even in corn, where prices have been notably low for a long time, the showing is not as bad as might be expected. Wheat is the only grain to make an adverse showing in this study of Milwaukee prices with the No. 1 Dark Northern selling at \$1.45 to \$1.48 per bushel against \$1.50 to \$1.71 per bushel for the same grade a year ago.

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The rate of interest on advances at the Milwaukee Chamber of Commerce has again been fixed at 6 per cent, the same as the rate has been for many months preceding.

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Mrs. Molly H. Widell won her battle to prevent the seating of Charles H. Peavey as a member of the Wisconsin Grain Commission. Mrs. Widell maintained that her successor was not qualified to hold the office because he was an employee of railroads, which the statute specifically prohibits for all incumbents of the office.

After a long period of waiting the attorney general of the state made a ruling that Mr. Peavey was an employee of a railroad and thus automatically barred from holding the office. Gov. Blaine appointed Mr. Peavey to succeed Mrs. Widell. The decision will enable Mrs. Widell to collect the salary for the period when the dispute was on.

The latest angle of the case, however, bars both of the people scrapping for the office as the new governor, Fred Zimmerman, ignored both of these persons and appointed John A. Bardon to the state grain commission. He is now serving in the office and Mrs. Widell has nothing to do but collect her back pay and

find a new job, while Peavey never actually qualified for the office, although appointed by the preceding governor.

* * *

"A great worry is off our minds," declared Secretary Harry A. Plumb, of the Milwaukee Chamber in discussing the refusal of the Interstate Commerce Commission to sanction the proposed cut in grain rates by the Minneapolis & St. Louis and the Soo Lines from the Twin Cities to the seaboard. Mr. Plumb stated that the Milwaukee grain trade would have been compelled to fight for a similar reduction in rates to this market, or in turn to suffer a decline in receipts, which might easily have been of large proportions.

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A claim of the Winona Malting Company for remission of Federal income taxes is of great interest to Milwaukee malting men, since both of the plants involved were later purchased by the Froedtert Grain & Malting Company. W. A. Teipel, vice-president of the Froedtert company, declared that the appraised valuation of the two plants before prohibition was \$1,000,000 but that they were purchased later by the Milwaukee concern for \$250,000. In the returns for 1918 the Winona concern deducted \$153,000 from the value of the plants for loss of good will. The Internal Revenue Department refused to allow the claim and it was pressed in the courts. Mr. Teipel said the Milwaukee malting companies had no such losses as a result of prohibition, as they had large export trade in malt. Hence they asked for no reduction in taxes in the way demanded by the Winona concern.

TOLEDO
S. M. BENDER CORRESPONDENT

THE past month has witnessed a steady decline in the discount of No. 2 Red wheat under Chicago May future. Milling demand, both local and outside, has been slow. Export trade has been spasmodic most of the time, with only occasional large sales. The movement has been heavy, despite lower prices. Many of the dealers have wondered where all the wheat is coming from, as the movement has been almost continuous since harvest. It is very unusual for Soft Red wheat to be at a discount at this time of year and such a situation as the present is without precedent in the memory of dealers and millers in this market. There is some doubt as to whether this variety of wheat will go to a premium before the season is over. Bids out of here have been as much as 10 cents and more under the Chicago May. Mixed wheat is selling at a discount because mills are not anxious for it. Grading has been unusually good since the first of the year and the majority of arrivals are of good milling quality. Farm reserves do not offer any incentive for bullish enthusiasm either and it is likely that some other stimulant will be needed to raise prices. The acreage in this state is smaller than a year ago and some of the fields have gone through poor fall weather, as well as freezing and thawing the past three months. It remains to be seen how badly the plants have been damaged.

Millfeeds have been the backbone of the milling industry for some time and mills have had but little trouble in getting them out of the way. In fact, the only drawback with some has been to get the feeds for delivery. Output has been so small with some that they have had trouble filling orders. Shipping orders on old bookings have been coming in good and are being rapidly cleaned up. Colder weather has stimulated the interior demand so that country mills have been busy supplying their trade. Prices have remained strong in spite of declines in wheat or other grains. Feeding operations have been under-estimated, in the opinion of those in close touch with conditions and this has been the big factor in the upward price trend. Mixers have been good buyers of late because of the demand for their special feeds. Deferred buying is very small, as most of the trade are in need of feeds for immediate use. It is almost certain feeds will remain strong until pastures start to come and warmer weather sets in again.

Coarse grains have been hit by the poor cash demand, especially for corn and the decline in futures. Corn grading has been just fair, with some danger in shipping because of the sudden warm spells that have appeared. The movement of corn has been below normal for this time of year. Shippers have been warned of the danger in long hauls. Kiln dried corn has brought fair prices, but the demand has not been what it should be. Fancy heavyweight oats are bringing excellent premiums and the inquiry for them is quite brisk. The lighter oats are not doing so well and buyers are not so plentiful. Rye trade, both domestic and for export, has dragged of late, though good sales have been put through occasionally.

Hay dealers have been rather disappointed in the demand this fall and winter and say there are large stocks still to be disposed of on the farms. Prices have suffered of late in most varieties except Clover. Alfalfa has been wanted by some of the trade, though on a small scale. Hay is easier to buy now than when it was several dollars higher. Lower grades are plentiful, but demand for them very slow. Dealers are looking for a rather spotty trade until the racing season opens.

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Clover seed has had its ups and downs during the past month and of late has shown some signs of weakness. Domestic and imported cash and October, which represents the new domestic crop have been the only strong points. Trade has been rather restricted of late and buying support is slow in appearing. A large spring demand for cash would be the best medicine the Clover market could have at this time. Dealers report a fair cash trade right now, but are expecting it to be much better before the month is over. It is thought farmers may hold off on their purchases until the last minute, as many do not know just what they want to sow. The stocks here are smaller than they have been in former years and with a normal demand should disappear rapidly. Advices from over there indicate they have exported their surplus and what they have left is mostly of inferior quality. Imports so far are about one-half those of last year and with our domestic shortage to contend with should cause strength before the season is over. Buyers are taking the Toledo prime, which is imported seed, because of its high quality shown in purity tests and large discount under domestic seed. There are some sections of the country that still want the domestic seed, but those who have tried the imported in actual tests have been well satisfied, according to local dealers. It is well to remember, they say, that Clover was primarily an imported seed from France and England and the seed they now raise is superior to those early brands. October Clover has shown strength and has a long road to travel until harvest offerings many opportunities to dealers and investors. Its present discount under domestic seed is one of the best points in its favor. Alsike has been firm, with light trade and some demand for high quality cash offerings. Timothy has been weak, due to the plentiful supplies of prime and lack of fresh buying power. The spring trade in seeds will control the price trend and if brisk could easily cause them to sell higher.

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Raymond L. Lipe, retired grain man, and his family have arrived in Toledo after a several months' tour of South America.

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Louis Schuster, of C. A. King & Co., was confined to his home for a few days recently with grippe, but is able to be in his office again.

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Dealers here are of the opinion that the market will be more like its old self with such bills as the McNary-Haugen, Curtis and others out of the way. The removal of certain restrictions on trading in Chicago will also tend to make a more free market.

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Farmers' grain dealers in session here during the past month were not optimistic about the wheat outlook in the state for this year. The lack of a good start last fall, coupled with freezing and thawing and a smaller acreage may bring a decided cut in the normal crop.

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Receipts of grain for the past month were: 772 cars of wheat, 401 cars of corn, 220 cars of oats, 13 cars of rye and three cars of barley. Total cars inspected, 1,359.

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C. S. Coup, vice-president and general manager of the Northwestern Elevator & Mill Company of this city, recently returned from St. Petersburg, Fla., where he had a short vacation. John H. Taylor of the same firm has left for New York and will go to Florida before his return.

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Louis Chase, president of the United Flour Mills Corporation, Grafton, Ohio, has improved greatly since his arrival in Phoenix, Ariz., where he went to relieve an asthmatic condition.

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Work was started on the new grain storage for the National Milling Company during the past month. The capacity will be increased by 1,000,000 bushels. The contract was let to the MacDonald Engineering Company, of Chicago. This additional will bring the total storage capacity up to 2,500,000 bushels.

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F. E. Barker of the Carr Milling Company, Hamilton, Ohio, was a recent visitor on the Exchange floor during the past month.

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The Farmers Grain Dealers Association of Ohio held its annual two-day session in Toledo February 22-23, at the Waldorf Hotel. H. Wallace Applegate, president of the Exchange, welcomed the dealers to Toledo and Roy G. Arndt of Bellevue, Ohio, made the response. Farmers' elevators in Ohio were reported as having greatly improved their financial

position by S. G. Foster, of the Farm Extension Bureau, Ohio State University. Phil Sayles, president of the Ohio Grain Dealers, made a short address at the Tuesday morning session. C. W. (Judge) Palmer of Defiance, Ohio, discussed proposed farm legislation and entertained the dealers during most of one session. Mr. Palmer talked as a supporter of the bills and some very good points were brought out. The annual banquet was held Tuesday evening, February 22, in the main dining room of the Waldorf Hotel. Jesse D. Hurlbut, treasurer of the Toledo Grain & Milling Company, and a former president of the Exchange, was toastmaster and introduced the speaker of the evening, Rev. Stephen K. Mahon of this city. Officers for the ensuing year were elected at the Wednesday afternoon session, as follows: President, N. G. Bennett, McComb, Ohio; vice-president, William Horn, Castalia; secretary-treasurer, Louis Schmunk, Rocky Ridge, Ohio; directors, Oscar Slusser, Fostoria; L. I. Winn, Grelton, and O. W. Cole, Jenera.

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The Toledo Produce Exchange Traffic Association held its regular monthly meeting at the Toledo Club during the past month. Many rate subjects of importance were discussed and cussed after a very fine dinner had been served. Toledo grain firms and mills were represented in full and music was furnished by Ben Hoffner and his "Jo."

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William E. Savage, president of the Imperial Grain & Milling Company, is spending several weeks in Florida, where two of his daughters and a son are located. Cards received by friends tell of good fishing, bathing beauties and other summer features that make the out-of-luck boys back here rather jealous.

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Calvin Amstutz of the Pandora Milling Company, Pandora, Ohio, and Edward Fauble of the Swanton Milling Company, Swanton, Ohio, were among those seen on the Exchange floor during the past month.

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Arthur A. Cunningham of the Sneath-Cunningham Company, Tiffin, Ohio, visited friends here during the month and expressed the opinion that wheat in farmers' hand at the end of the season would be small.

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J. S. Bache & Co., Chicago grain firm, have discontinued their street office here on account of the expiration of their lease and failure to find another suitable location at reasonable rent. Charles Murphy, manager, will return to the Chicago office and Carl Goodeman, assistant manager, has joined the staff of Collin, Norton & Co., local members of the New York Stock Exchange. George Secrist will continue in his capacity as private wire operator on the Exchange floor.

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Fred Mayer, of J. F. Zahm & Co., is looking forward to his annual sojourn with Toledo friends at French Lick Springs, Ind.

BUFFALO
ELMER M. HILL CORRESPONDENT

ANOTHER grain elevator with a storage capacity for 1,500,000 bushels is under construction at Buffalo. The City Council early this month approved a permit for the new grain structure which is being built by the International Milling Company at 120-146 Childs Street. The structure is of reinforced concrete and will cost approximately \$300,000, without equipment, and will be ready for use before the rush of grain to Buffalo in the fall season.

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The Monarch Engineering Corporation of Buffalo has been awarded the contract for building two movable marine towers for the new Buffalo elevator of the International Milling Company.

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The Maritime Milling Company of Buffalo has completed its 1927 building program which includes a 150,000-bushel addition to its grain storage equipment, a molasses storage tank of 60,000 gallons capacity, a new boiler house and a modern fireproof warehouse for the storage of sacked feeds.

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The Eastern Federation of Feed Merchants held a two-day convention in Binghamton, February 22-23. Among the speakers were Dr. C. E. Ladd, director of extension of the New York State College of Agriculture, and V. R. Corru, of Syracuse, secretary of the New York State Builders Supplies Association. H. J. Brandt of Binghamton, general chairman of the feed merchants' organization, presided. About 300 dealers from all parts of New York State attended the conference.

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The Shredded Wheat Company of Niagara Falls, did the greatest volume of business in its history in 1926, according to a report submitted to the directors

at the annual board meeting held early this month at the Niagara Falls factory. Dr. Charles K. Colby of Montreal was elected a member of the board to succeed the late Joseph Henderson of Toronto. Other directors elected include William C. Breed of New York, Paul A. Schoellkopf of Niagara Falls, Robert W. Pomeroy of Buffalo, George A. Mitchell of Buffalo, DeLancey Rankins of Niagara Falls, Ogden L. Mills of New York, and Ogden M. Reid of New York. Announcement of the company's business for 1926 said that the increased sales were not confined to the Niagara Falls plant but extended to subsidiary companies in England, on the Pacific Coast and in Canada. The company has just completed a new plant at Welwyn Garden City, Herts, England, and during the past year the company installed a new power plant in connection with its Canadian branch. The 1927 development plans call for the construction of a new factory in Canada.

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W. A. Lansker, formerly European sales manager of the International Milling Company, with headquarters in New York City, has been transferred to Buffalo to take charge of the completion of the new plant under construction in this city. He will organize a sales force for the eastern division. Offices have been established in the Chamber of Commerce Building. Mr. Lansker has traveled through Europe, Asia and Africa for the International Milling Company.

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The American Miag Corporation has opened its American headquarters in the new Liberty Bank Building in Buffalo. The company is a subsidiary of the Muchlenbau & Industrie Aktien Gesellschaft of Frankfurt, Germany, builders of grain elevators and flour mills which for more than 40 years has been active in continental Europe, China, Japan and Latin America. "Miag" is a coined word, the letters being taken from the initial letters of the German corporate name. The elevator division of the new Buffalo company is under the direction of C. Lampe.

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Unusually moderate weather during the last six weeks has removed practically all the ice from the Great Lakes with the possible exception of some of the narrow channels in connecting rivers, with the result that there will be an early opening of navigation this season. All of the grain carriers which held winter storage cargoes at Buffalo have been unloaded and are waiting for the opening of the season next month. Grain elevators at both the American and Canadian Head of the Lakes are filled with grain and some boats already have taken on their first cargoes. It is expected the first grain of the season will begin arriving in Buffalo within a month.

DULUTH

S. J. SCHULTE - CORRESPONDENT

WITH supplies of all grains in Duluth and Superior elevators now aggregating more than 25,500,000 bushels, operators are not apprehensive regarding congestion developing before the spring movement by lake to the East begins, though marketings of wheat, oats and other grains here have shown increases lately. It is claimed that the great bulk of the approximately 9,000,000 bushels of Spring wheat, Winter wheat and Durum held in the houses here and a good proportion of the 7,000,000 bushels of rye are earmarked for shipment early in the navigation season, and that room can be depended upon to take care of the expected early run from interior elevators to the terminals here. Vessels are now on the alert for shipping, but it is claimed that very little boat space has so far been contracted for. A rate of 3½ cents per bushel for Buffalo delivery was recently offered and operators were given a rate of 10 cents to Montreal for rye, as compared with 9½ cents last spring. Exporters regard the Montreal rye rate as too high, and they are also looking for a better rate being made to Buffalo before the shipping season opens.

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Only one change in membership on the Duluth Board of Trade was reported during the last month. B. B. Canfield of the Commander Elevator Company, Minneapolis, took over the seat of Charles E. Lewis, who had not been actively interested in this market during the last several years.

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Operators on this market are taking advantage of the dull period to steal away to warmer climes to rest up in winter vacations. James A. Graves, manager of the Capitol Elevator Company, is down at New Orleans, where he is reported to be playing the ponies with more or less success. Ward Ames and Adam G. Thomson are still at Miami, Fla. E. N. Bradley, manager of the Globe Elevator Company, is down in California, but he is expected home shortly. Oscar Martin, a bachelor member of the Board, is with the dusky maidens in Honolulu, and George

G. Barnum, Jr., is out in California. He is scheduled to return shortly. W. J. McCabe has returned after taking in the West Indies trip, which he pronounced a distinct success from rest and scenic points of view. He was greatly impressed with the appearance of Havana, which has grown from 120,000 on his last visit there 20 years ago to about 450,000 population at the present.

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W. D. Jones, manager of the Hallet & Carey Company's Duluth office, is back from a three weeks' vacation spent at New York, Boston, Cleveland and other eastern points. When in New York he was the guest of Julius H. Barnes. He found Julius to be extremely bullish regarding the grain marketing outlook, basing his confidence upon higher prices being set lately, upon the close relationship that has been established between supply and demand conditions and to the apparent certainty that foreigners will have to look to the United States to a greater extent for their food grains in the near future. Mr. Jones found Mr. Barnes to be more actively interested in the export trade than he had been in a considerable period through his connections with the various markets, including Duluth and Winnipeg. W. H. Hitchcock, a member of the Barnes-Ames Company's New York office, was a recent visitor on the Duluth market on his return from Winnipeg, where he had been studying the general supplies situation.

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Trading in spot Durum and in the futures has been on an active scale on this market during the last few weeks and at the latest writing buyers for the mills were bidding 25 cents over the May price for choice Amber Durum. It is generally believed that the premiums in Spring wheat will be gradually eliminated and that the grain will be on a May delivery basis before long. The basis on No. 1 Northern is now from 2 to 10 cents over May. The marketing of the off-grades and smutty Spring wheat and Durum is proving an increasingly difficult problem. The elevators claim that they are finding themselves loaded up with off-grade stuff and that they require a proportion of milling grades grain to sweeten them up and that they are finding it difficult to obtain at prices they feel they can afford to pay on account of millers' competition in the marketing of the current receipts. Grain men here feel like according their fullest support toward any movement calculated to reduce the smutty grain factor. They feel that to obtain any tangible results concerted action by all interests must be taken in the smutty grain problem.

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An active demand has prevailed in the spot market in rye all along during the last several weeks, strong competition existing. Buyers for the Itasca Elevator Company, Cargill Elevator Company and the Barnes-Ames Company have been rated as perhaps the most persistent operators. The result has been that the daily receipts have been assured of prompt handling, a factor that has contributed to a more liberal run of that grain from country elevators lately. The present basis for spot No. 2 rye here is the May price. Some operators are hopeful of a stiffening up in the rye premium after more space in the elevators has been made after the opening of navigation. Up to the present the elevator interests here have felt constrained to go a little slow in offering inducements that might lead to a run that would soon plug their grain storage houses up to the ceiling limit.

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Only a moderate spot trade was put through in oats here during the last month, as receipts from the country have been light. Holders of the 7,650,000 bushels of oats in the elevators are generally bullish in their views, confidence having been inspired by the strong market that has prevailed during the last two months, with spot No. 3 White selling at a basis of two cents under to the Chicago May price. Commenting upon the oats market situation, Earl M. White, of the White Grain Company, said that his house had experienced a steady demand from the dairying and lumber interests and he noted that there now appeared to be a likelihood of a substantial export inquiry for oats turning up this spring. Mr. White was impressed by the fact that the elevator interests appeared to be reluctant to book small orders from jobbers for oats, as they are counting upon export inquiry being on a sufficient scale to enable holders to unload elevator stocks early in the season. The few cargoes of oats shipped down to Buffalo last fall are reported to have been disposed of in the main. Buyers have been found ready to pay liberal premiums for Duluth oats, as the bulk of the holdings here are heavier grain of the 1925 season vintage. A fair amount of oats is estimated to be still held at country points over this territory, but it is claimed that growers are inclined to hold them as a safeguard in case of emergency. It is claimed, though, that they would let go in the event of prices being marked up above their present levels. With the greater interest being shown in dairying and stock raising in this territory a greater proportion of the annual production of oats is being absorbed on the farms.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

REPORTS of the local grain trade indicate that business is a trifle better than it has been. Seed oats are moving, seed corn will soon be moving more freely; while there is a very fair demand for general feedingstuffs, including corn, oats, manufactured and mill feeds, hay and bedding straw. Poultry raising in the state is increasing and poultry raisers, as well as hog, cattle and sheep raisers are giving more attention to balanced rations, etc. In central Kentucky the thoroughbred horse breeding industry was never more active, and a number of rich eastern men have been added to the list of owners of Kentucky breeding establishments.

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Grain men were in hopes that Congress would pass laws enabling a few distilleries, at least, to get started this spring on production of medicinal whiskeys, which would have resulted in a more active demand for corn, rye and barley or malt, but Congress appears to have completed a special session with very little really done. Elevators are fairly busy with daily handlings, plus an active operation of corn dryers, as corn continues quite damp, and needs drying service.

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Ted Borries, vice-president of the Ballard & Ballard Company, reported that excavation work had been completed, and forms were up and concrete pouring starting on the company's new 1,000,000-bushel grain elevator, on the back of its large mill yard at Louisville.

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Ed Scher, Bingham Hewett Grain Company, Louisville, reported that the company had been shipping principally on old orders, with a little demand coming in now for seed oats. Corn has also been in fair demand for kiln dried stock. Oats are a little quiet. Rye is hardly handled in this market since the distilleries quit operations.

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The Kentucky Public Elevator Company reported that the plant was running its corn drier until about seven o'clock every evening, in taking care of still large demand for corn drying, most of the corn coming in at 20 to 22 per cent moisture, and being dried down to around 15 to 17 per cent. It was reported that oat sacking had been active, as there is more seed oat demand than is usual. Daily movement in and out is about normal at 10 to 12 cars. The company has about 200,000 bushels of wheat and as much of corn on storage, and around 15,000 of oats, having loaded out the one and only car of rye on hand.

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At the office of Henry Freuchtenicht it was reported that business had been better, poultry, dairy and other consuming interests having been in the market, there having been good demand for mill and manufactured feeds, as well as seed oats, hay, etc.

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Oscar Fenley, president of the Kentucky Public Elevator Company, has recently returned from Eau Gallie, Fla., where he was a guest of Dr. David Morton, president of the Ballard & Ballard Company, Louisville, who maintains a winter home there.

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Richard M. Hartwell, of the H. Verhoff Company, grain dealers, who died last month, left an estate of approximately \$50,000, according to will which was recently probated.

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Leonard A. Hewett, of the Bingham Hewett Grain Company, Louisville, was one of the first men in this section of the country to talk long distance to London, when the service was first established last month. A merchant had the first connection, and Mayor Will the second. On the second connection Mr. Hewett followed Mayor Will in speaking to Avery Robinson, of Louisville, who is now residing in London, and who is an old friend of Mr. Hewett.

* * *

Better Clover crops are in prospect for next fall, it is claimed, as demand for Clover seeds has been very active. Domestic Red Clover and sapling have been scarce. Imported dyed Clover is selling at more than \$10 a hundred under domestic. Timothy sales have been light.

* * *

Pastures and fields have come through the winter well in Kentucky, there not having been much cold weather, and some very good snow protection, indications pointing to good grass crops from old fields this year, with probably a considerable increase in grass acreage.

* * *

The Acme Mills, at Hopkinsville, Ky., on February 11, placed their first radio program on the air, from station WFIW, the feature address being delivered by Governor W. J. Fields, and Judge Alvan

Clark doing the announcing. It was reported that William B. Anderson, Jr., president of the Acme Mills, had spent approximately \$100,000 on the broadcasting station, which is twice as powerful as any station in the state. Programs have been heard and reported from every state in the union, at various points in the West Indies, Mexico and Canada.

Hay movement has been slightly better than it was, due to better road conditions, and better river transportation. Prices are steady at the following levels for baled stock, car lots: No. 1 Timothy, \$20 a ton; No. 2, \$19; No. 1 Clover, \$20; No. 2, \$18; No. 1 Mixed, \$20; No. 2, \$18; Alfalfa, local, \$20; Western, \$28; wheat and oat straw, \$13.50; rye straw, \$15. Clover has been scarce, not much being offered.

Grain prices at Louisville show No. 2 corn at 75 cents for White and Yellow; and 72 cents for No. 3, with No. 4 at 69 cents. Mixed are one cent under white and yellow on all grades. Oats are at 53 cents for No. 2 white, 47 cents for No. 3 and 44 cents for No. 4. Rye is quoted at \$1.10 and wheat \$1.40.

There has been a little gloom in the office of the Louisville Seed Company this month, as a result of a peculiar illness of H. D. Hays, who has been at a hospital for two weeks, after an illness of a month. Physicians have been unable to diagnose his trouble. While ill, Mr. Hays also lost a married sister in New York.

Field seed business has been quite active in Louisville this spring, there having been good demand at firm to advancing prices, all Clovers having been strong, while orchard grass and red top have been advancing, and bluegrass has been holding its own. Late seeds, such as millet, cow peas and soya beans have been in better demand, and will move better next month.

Principal quotations less than carlots, at Louisville, show: Red Clover, Northern French, \$31.50 to \$32.50; domestic, \$42 to \$43; sapling, \$44 to \$46; Alsike, \$37; Alfalfa, \$20; Grimm, \$35; Sweet Clover, White, \$13.50; Yellow, \$14; Japan Clover, \$9; White Dutch, \$38; Timothy, \$6.50; Orchard, \$15; Kentucky Blue, \$22 for 21-pound; \$20.75 for 19-pound, and \$19.50 for 17-pound; Red Top, \$27; Rosen Rye, \$1.25; Northern White oats, \$1.25; turf oats, 90c; Burt oats, 80c; No. 2 selected White oats, 75 cents; black cow peas, \$2.65; Whips, \$2.65; New Era, \$2.50; Mixed, \$2.40; Mammoth Yellow soya beans, \$2; Manchu beans, \$2.40; early yellow, \$2.40; Hollybrook, \$2.50; Bloke Wilson, \$3; Virginia Browns, \$2.85; Tenn. Cultivated Millet, \$1.85; Sudan Grass, \$7 a hundred. Cane seed, red top and orange, \$1.60; amber \$2.

Clell Coleman, Kentucky Commissioner of Agriculture, also a seed, grain and coal dealer, with operations at Harrodsburg and Burgin, has announced that he will run on the Democratic ticket for state auditor in the fall elections. Coleman was formerly sheriff of Mercer County, a position now held by one of his sons, who is also associated with his father in the business.

INDIANAPOLIS

H. M. RUDEAUX

CORRESPONDENT

A CONGESTED condition prevails in Indianapolis, caused by the heavy receipts of corn during the past weeks. If conditions were normal and corn in good condition, allowing receipts to move freely, the present arrivals would only be normal, but with weather conditions as they are the grain is rather hard to dispose of. Every car sells on its own merits and damaged grains are seriously considered and have a strong tendency to lower the prices even though the grade be the same. Driers are working day and night in order to relieve the situation. White corn is selling at the same levels as the Mixed since the White corn millers are not in the market at the present time, and shippers are advised to hold their White corn until some future date. It might be advisable for shippers to hold their grain, as the present state of affairs makes it very dangerous and unprofitable trading.

Grain merchants are complaining of the heavily loaded cars which are difficult to sell as most buyers insist on a thorough inspection, which heavily loaded cars do not carry, and the shallow inspection will not be accepted as final. In several instances there have been complaints of delays in drafts, which is dangerous at this time. In one case a car of corn arrived on the fifth, without papers and was held until the seventh, owing to delay of presentation of the draft. Upon investigation it was found that the shipper sent his papers through Chicago, instead of direct to Indianapolis. After the papers arrived the car had to be reinspected and during the period of delay it started to heat. Shippers should by all means get

their papers off immediately and send them direct to Indianapolis, as banking facilities in this city are equal to any in the country. Sending drafts a roundabout way delays payment and holds the shipper out of his money too long, and furthermore it is taking a long chance.

There is a good demand for good No. 2 Red Wheat at present but the lower grades are very hard to dispose of and not wanted. Receipts are extremely light. Oats are arriving in scattered shipments, mostly off grade with a few scattering cars of No. 2 Whites which are easily sold at a good price. Most of the arrivals of corn are grading 5 and 6 and lower. There is a fair demand for cars showing slight damaged grains, but large percentage of damaged grains is hard to dispose of. This grade of corn is only bought where drying facilities are at hand, and even then, unless the damage is slight, it is hard to sell. Where there is a slight damage the drying brings up the grade, and this is seriously considered by the buyer. Seed oats are in good demand and selling freely when obtainable. Only the good heavy No. 2 Whites can be offered for seed and these are a scarce article. However, there will be the normal acreage planted.

The Agricultural Experiment Department of Purdue University at LaFayette, Ind., has provided for another Grain Trading School to be held on March 15, 16, and 17, and the entire grain and milling interests are invited to attend all sessions of this short course. The Indiana Grain Dealers Association, through its secretary, Charles B. Riley, is urging all grain dealers to be represented. A special bulletin has been prepared outlining the three days' program. C. A. Waalen, Federal grain supervisor at Indianapolis, will be present and deliver some interesting talks.

Walter M. Moore, president of the Indiana Grain Dealers Association, and his wife, are spending about six weeks in Florida and Cuba. They will return by way of the east coast by motor.

H. E. Kinney and wife are traveling over the state of Florida. Their stay will be indefinite owing to Mrs. Kinney's health.

Charles B. Riley and wife are spending some time in Mobile, Ala., and expect to return to Indianapolis about the middle of the month. Mr. Riley has been in poor health for some time and hopes the rest will improve his condition.

McComas & Springer have moved their office from 602 to 618 Board of Trade Building.

Hay and mill feeds are draggy with no demand. Some of the pioneer hay dealers say that the condition is the worst they have ever experienced. There is absolutely no demand in any direction. One of the principal causes is the low rates from the West, as hay can be shipped from Kansas to eastern points on a lower rate than from Indiana and Ohio.

GRAIN NEWS FROM BOSTON

By L. C. BREED

New England Acme Service Stores, Inc., Springfield, Mass., has been incorporated to deal in hay, grain, feed, flour, etc. The capital stock is 5,000 no par value shares. The incorporators are Doris C. Kaubeck, Wallstin, Dorothy A. Hogan, Brockton, and Carl P. Nielsen, Hyde Park.

There is a fair demand for corn and oats in transit and for shipment. In feedstuffs there is a moderate business going on. As the mills are not running full, offerings are not large and the market is tending steady. For rejected wheat for chicken feed there is a good inquiry. For a time during the past month there was none offering for shipment, but supplies are now available. Of late there has been no serious delay in transportation owing to snow.

Seed dealers report having booked the normal amount of grass seed and corn, oats and rye for spring delivery to country trade in New England.

The following is a partial list of the committees for the present year of the Exchange: Trustees of the Permanent Fund: Elmer E. Dawson, Milton C. Cuslaing, Dean K. Webster. Finance Committee: C. N. Jaquith, Edward H. Day, Warren G. Torrey. Appraisal Committee: H. N. Vaughn, Dexter F. Parker, Albert W. Goodnow, John J. King, A. S. McDonald. Arbitration Committee: Frank A. Noyes, R. T. Hardy, Arthur T. Safford, H. L. Hammond, Matthew D. Benjamin. Grain Committee: Charles Varga, Seth Carlin, Lyman G. Smith. Grain Trade: Fred S. Colby, Farnsworth K. Baker, Lyman G. Smith, George W. Lee, Arthur F. Hopkins.

Among the visitors to the Exchange during the month of February, outside of New England, were the following: H. D. Richeson, Chicago, Ill.; E. W. Stuhr, Buffalo, N. Y.; H. A. Rumsey, Chicago, Ill.; C. C. Lewis, Buffalo, N. Y.; Paul Gramde, Rome, Italy; H. E. Tweeden, Buffalo, N. Y.; E. C. Grimes,

Minneapolis, Minn.; Geo. F. Booth, Buffalo, N. Y.; W. J. Grover, Kansas City, Mo.; William H. Besarick, Jr., Baltimore, Md.; R. H. Stewart, Chicago, Ill.; O. M. Richards, Cortland, Ohio; A. W. Clark, Cleveland, Ohio.

There is a fair inquiry for the better grades of hay, for which prices are ruling fairly firm. Medium and low grades are in plentiful supply and demand rather quiet. Receipts of hay at Boston during the month of February, 204 cars; straw, 12 cars.

As tabulated by the Boston Grain and Flour Exchange, the receipts of grain at Boston during the month of February were as follows: Wheat, 390,925 bushels; corn, 2,125 bushels; oats, 64,725 bushels; rye, 27,675 bushels; barley, 1,375 bushels; malt, 3,675 bushels; millfeed, 61 tons; cornmeal, 661 barrels; oatmeal, 9,785 cases and 605 sacks.

Stocks of grain in regular elevators at Boston February 28 were as follows: Wheat, 643,589 bushels; oats, 31,611 bushels; rye, 5,755 bushels.

Hay is still the undisputed king of Massachusetts farm crops. In 1926 it occupied 488,000 of the 580,000 acres of farm land in the state. In spite of some unfavorable weather, which causing a falling off in production, the Crop Reporting Service estimates the value of the crop at \$14,197,000.

SUED FOR SAYING OFFICE BUILDING RESEMBLES ELEVATOR

The *New Yorker*, a nationally distributed weekly magazine published in New York City, has announced that, owing to an editorial assertion in one of its recent issues, to the effect that a certain Manhattan skyscraper looked "like a grain elevator," it was sued for \$500,000 damages. Legal counsel for the plaintiff was subsequently persuaded that the simile was not vicious enough to warrant a test of the case in court.

SUBMITS \$20,000 DOCKAGE BILL FOR SINGLE COUNTY

Dockage and grain diseases came in for the major discussion when the Better Seed Special Train arrived at Hallock, Minn., last month. Over 100 prizes, offered by local business man for early comers, brought a large crowd to the station before the train arrived.

Arrangements were made for a series of demonstrations this spring, dealing with the treatment of seed rye. Much rye is grown in this section, which suffers a loss of 3 per cent from ergot. R. C. Rose, of the Minnesota College of Agriculture, began the demonstration of control for grain diseases. It was pointed out that the county's dockage bill last year was approximately \$20,000.

CITES CAUSE OF FARM ELEVATOR FAILURES

Failures of co-operative elevator grain companies are due to improper organization, inefficient operating methods and mismanagement, said Andrew W. McKay of the bureau of agricultural economics at Washington, in addressing the Illinois Farmers Grain Dealers Association at Jacksonville, Ill.

Analysis of 277 failures indicated that 114, or about 41 per cent gave unsound organization methods as one of the causes, he said. Features which tend to make the organizations permanent institutions he listed as a real need for a farmers elevator, co-operative principles; provisions for including new stockholders bringing in thereby new blood and energy, and adequate capitalization.

"Handling of competition is one of the policies in careful operating that needs consideration," said Mr. McKay. "Keen competition need not be feared by a farmers' elevator which is operating at low unit cost and which knows how to judge grain values."

URGE WATERWAY DEVELOPMENT

Further legislation for the development of an inland waterway system was urged in a resolution of the association at its final session. Construction of hydro-electric plants under Government control was also advocated by resolution.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Fifth Year

RECEIPTS AND SHIPMENTS

Following are receipts and shipments of grain, etc., at the leading terminal markets in the United States for February:

BALTIMORE—Reported by James B. Hessong, secretary of the Chamber of Commerce:

Receipts		Exports	
1927	1926	1927	1926
Wheat, bus. . .	2,113,526	630,920	1,982,985
Corn, bus. . .	196,923	143,280	52,229
Oats, bus. . .	72,862	208,986	30,000
Rye, bus. . .	134,900	57,296	255,361
Barley, bus. . .	138,870	554,861	365,610
Malt, bus. . .	9,963	2,379	606,836
Buckwheat . .	1,196		
Hay, tons . . .	432	948	
Straw, tons . .	12	36	
Mill F'd.tons. .	841	1,617	
Flour, bbls. . .	92,360	65,385	15,377
			12,712

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	1,284,000	1,167,000	1,100,000
Corn, bus. . .	9,682,000	11,135,000	1,845,000
Oats, bus. . .	3,624,000	2,682,000	1,562,000
Barley, bus. . .	630,000	630,000	158,000
Rye, bus. . .	147,000	117,000	27,000
Timothy Seed, lbs.	1,780,000	1,801,000	1,988,000
Clover Seed, lbs.	1,857,000	2,079,000	2,254,000
Other Grass Seed, lbs.	1,443,000	1,843,000	2,036,000
Flax Seed, bus.	240,000	140,000	
Hay, tons . . .	11,220	15,112	1,619
Flour, bbls. . .	990,000	946,000	619,000
			594,000

CINCINNATI—Reported by J. A. Hallam, Chief Inspector of the Grain and Hay Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	228,260	310,000	191,800
Shelled Corn, bus.	648,200	579,600	379,400
Oats, bus. . .	228,000	260,000	206,000
Barley, bus. . .	1,400	7,000	
Rye, bus. . .	5,600	5,600	4,200
Grain Sorghs. .	4,200	2,800	
Ear Corn, bus.	12,000	34,000	

DENVER—Reported by H. G. Mundhenk, secretary of the Grain Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	350,000	603,000	91,500
Corn, bus. . .	302,250	730,050	170,500
Oats, bus. . .	40,000	74,000	26,000
Barley, bus. . .	34,000	40,800	6,800
Rye, bus. . .	4,500	3,000	
Hay, tons . . .	320	880	
Beans, C. L. .	26		180
			291

DETROIT—Reported by C. B. Drouillard, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	187,600		15,900
Corn, bus. . .	62,400		51,000
Oats, bus. . .	220,000		210,000
Barley, bus. . .	18,700		16,000
Rye, bus. . .	24,600		20,000

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	2,151,182	1,503,515	852,031
Corn, bus. . .	15,695	1,426	
Oats, bus. . .	24,005	403,378	60,763
Barley, bus. . .	80,880	27,438	72,500
Rye, bus. . .	1,106,295	359,794	28,471
Flax Seed, bus.	295,481	103,310	328,151
Flour, bbls. . .			177,815
			66,965

FORT WILLIAM, Ont.—Reported by E. A. Ursell, Statistician of the Board of Grain Commissioners for Canada:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	8,546,747	6,111	5,508,127
Corn, bus. . .	4,113	5,510	1,945,288
Oats, bus. . .	561,911	827,945	539,944
Barley, bus. . .	1,316,121	342,412	800,369
Rye, bus. . .	193,717	56,952	
Flax Seed, bus.	101,880	82,252	24,807
			9,879

GALVESTON—Reported by H. A. Wickstrom, Chief Inspector of the Cotton Exchange and Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .		1,381,500	9,561
Barley, bus. . .		135,000	
Rye, bus. . .		60,000	
Kaffir Corn, bus.		128,571	

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	227,000	239,000	245,000
Corn, bus. . .	2,631,600	1,662,000	1,547,000
Oats, bus. . .	528,000	496,000	484,000
Rye, bus. . .	1,600	1,400	3,000

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	5,677,000	2,616,300	2,667,000
Corn, bus. . .	1,737,000	2,072,500	259,500
Oats, bus. . .	312,000	443,700	284,000
Kafir, bus. . .	442,200	290,400	220,000
Rye, bus. . .	51,000	15,400	78,000
Barley, bus. . .	11,200	15,000	3,200
Cane, bus. . .	73,600	75,400	25,300
Bran & Shorts, tons	4,940	1,620	12,920
Hay, tons . . .	34,188	33,324	19,356
Flour, bbls. . .	64,025	64,350	642,525
			491,075

LOS ANGELES—Reported by M. S. Thiebaud, secretary of the Grain Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, Car'l'd .	250	169	
Corn, Car'l'd .	227	188	
Oats, Car'l'd .	22	30	
Barley, Car'l'd	144	136	
Kaffir Corn, Car'l'd .	46	6	
Flour, Car'l'd .	123	162	

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	200,200	103,600	32,825
Corn, bus. . .	1,813,000	1,270,920	398,125
Oats, bus. . .	926,640	863,430	629,328
Barley, bus. . .	668,980	536,180	139,202
Rye, bus. . .	239,135	117,445	56,336
Timothy Seed, lbs.	120,000	185,000	60,540
Clover Seed, lbs.	363,583	347,005	145,836
Flax Seed, bus.	41,470	65,780	1,430
Hay, tons . . .	579	1,117	216
Flour, bbls. . .	102,345	117,890	47,234
Feed, tons . . .	744	3,850	8,444
Malt, bus. . .	32,300	13,300	339,114
			254,700

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	5,269,370	6,545,300	2,045,340
Corn, bus. . .	1,492,190	1,392,130	656,610
Oats, bus. . .	1,082,530	1,475,170	2,595,740
Barley, bus. . .	824,340	1,164,900	592,800
Rye, bus. . .	357,780	350,260	303,490
Flax Seed, bus.	317,920	276,490	90,180
Hay, tons . . .	4,479	2,632	789
Flour, bbls. . .	33,877	17,981	815,341
			902,584

MONTREAL—Reported by J. Stanley Cook, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	438,104	802,593	66,449
Corn, bus. . .	53,648	19,023	14,452
Oats, bus. . .	437,457	299,188	72,201
Barley, bus. . .	88,380	110,822	3,387
Rye, bus. . .	23,290		
Flax Seed, bus.	2,318	40,279	
Hay, bales . . .	51,029	30,520	
Flour, bbls. . .	286,880	100,063	77,013
			125,514

NEW ORLEANS—Reported by S. P. Fears, Chief Grain Inspector and Weighmaster of the Board of Trade, Ltd:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	75	22	328,803
Corn, bus. . .	308	335	436,707
Oats, bus. . .	48	35	81,378
Barley, bus. . .	1	1	
Rye, bus. . .	17		205,714
Gr. Sorghums, lb. .	1	2	

Receipts ex. River Barges, Feb., 1927: Wheat, 5,619 bushel; Corn, 17,435 bushels; Rye, 252,237 bushels.

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	4,298,000	3,424,000	5,349,000
Corn, bus. . .	187,500	121,500	170,000
Oats, bus. . .	386,000	1,244,000	69,000
Barley, bus. . .	1,737,400	571,200	2,727,000
Rye, bus. . .	123,000	328,500	892,000
Clover Seed, lbs.	606 bags		2,815
Flax Seed, bus.	131,000		
Hay, tons . . .	3,760	3,588	
Flour, bbls. . .	851,225	963,340	298,000
			293,000

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	1,023,400	845,600	852,600
Corn, bus. . .	1,562,400	1,766,800	1,241,800
Oats, bus. . .	646,000	572,000	620,000
Barley, bus. . .	4,800	27,200	12,800
Rye, bus. . .	93,800	61,600	71,400
			2,800

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	65,200	56,400	49,200
Corn, bus. . .	2,517,850	2,673,100	1,294,700
Oats, bus. . .	628,200	735,200	465,200
Barley, bus. . .	91,000	149,800	11,200
Rye, bus. . .		3,600	1,200
Mill Feed, tons	26,660	30,640	31,210
Hay, tons . . .	2,380	1,640	480
Flour, bbls. . .	265,100	166,800	252,000
			189,800

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	1,751,497	1,099,024	1,427,910
Corn, bus. . .	38,844	58,182	
Oats, bus. . .	97,836	81,194	
Barley, bus. . .	140,149	80,294	291,767
Rye, bus. . .	29,708	1,471	
Flour, bbls. . .	171,916	183,808	36,687
			12,091

ST. LOUIS—Reported by Charles Rippin, secretary of the Merchants Exchange:

Receipts		Shipments	
1927	1926	1927	1926
Wheat, bus. . .	1,916,600	1,842,400	1,253,000
Corn, bus. . .	1,613,200	2,114,000	677,600
Oats, bus. . .	1,654,000	2,878,000	1,458,000
Barley, bus. . .	11,200	44,200	28,800
Rye, bus. . .	117,000	13,000	83,200
Kaffir Corn, bus.	97,200	58,800	21,600
Hay, tons . . .	6,876	11,496	2,340
Flour, bbls. . .	483,620	402,650	383,390
			453,520

SUPERIOR—Reported by H. A. Juneau, State Weighmaster of the Grain & Warehouse Commission of Wisconsin:

	Receipts		Shipments	
	1927	1926	1927	1926
Wheat, bus. . .	1,117,064	723,132	633,054	411,82
Bonded wheat, bus.	40,937	16,123	.....	.....
Bonded oats, bus.	3,566	1,195	.....	5,64
Bonded rye, bus.	692	2,312	.....	.....
Bonded barley bus.	15,709	24,408	.....	57,11
Bonded flax, bus.	5,709	1,193	.....	.....
Corn, bus.	16,917	4,439	.....	.....
Oats, bus.	145,265	49,154	120,366	18,91
Rye, bus.	830,140	191,907	29,011	72,71
Barley, bus.	65,395	8,235	35,625	.....
Flax, bus.	119,107	93,723	66,312	26,68

HAY, STRAW AND FEED

HAY QUARANTINE

From March 1 until November 1 each year until further notice, shipments of Alfalfa hay and meal from a dozen counties in Utah, Colorado, Wyoming and Nevada are forbidden shipment into Nebraska. The quarantine is to guard against the spreading of the Alfalfa weevil pest.

ST. LOUIS HAY CONDITIONS

In its letter of March 10, the Martin Grain Company of St. Louis, Mo., reports:

The Timothy hay market continues to rule quiet. There is a fair demand for the better grades of Timothy, No. 1 and good No. 2, but ordinary No. 2 and lower grades are dull and slow. The demand is slightly better the past few days. More hay selling than for some days past. Still the demand is very limited for the off grades of Timothy hay.

Light Clover Mixed hay is steady. There is a very good local demand for No. 1 Light Mixed but off grades are quiet.

Heavy Clover Mixed is in scant offering and in fair demand.

Pure Clover hay quiet, demand being only fair.

Alfalfa market continues to rule firm on high grade Alfalfa suitable for dairy trade but the lower grades are dull and slow.

The prairie hay market steady on No. 1 but dull otherwise.

HAY CASE ARBITRATED

A favorable decision was given the plaintiff by Arbitration Committee No. 1 of the National Hay Association in the case of Chas. E. Goss & Son of San Francisco, Calif., against Chas. Schaefer & Son of Brooklyn, N. Y. The decision was based on the telegram dated May 15, 1926, in which the Goss company clearly outlined to the defendant that San Francisco weights and grades were to govern in a sale covering 150 tons of Alfalfa hay. Wire confirmation by the Schaefer company took no exception to this part of the contract.

The claim of the plaintiff arose from the refusal of the defendant to accept a cargo of Alfalfa hay shipped by boat and which upon its receipt in Brooklyn was inspected and refused because of inferior grade. The amount of the claim involved \$2,715.71 and shipper's order bill of lading was drawn and attached to the draft and sent in the regular way to a New York bank.

The defendant has complied with the decision of the committee.

COMPANY AWARDED REPARATIONS

Sixty-four carloads of hay, shipped between January 1, 1923, and April 30, 1924, from points in Illinois to St. Louis, were involved in the complaint before the Interstate Commerce Commission of the Toberman Mackey Company (now the Toberman Grain Company), of St. Louis, against the Chicago, Burlington & Quincy Railroad. The Commission found the rate on hay from points in Illinois to St. Louis inapplicable and unreasonable and awarded reparation. The St. Louis company claimed that the rates were unreasonable and in violation of the long-and-short-haul provisions of Interstate Commerce rulings.

Shipments were made from what the Commission called the western group, embracing among others, Plymouth and Fowler, Ill., and from the central group, the latter covering, among others, Adair and Table Grove, Ill. Rule 77 was in effect in connection with rates from Cameron and Monmouth, Ill. The central group points, the report said, were intermediate on the route from Monmouth and Cameron to St. Louis and that that rule was a substantial compliance with the fourth section. The Commission said that it had repeat-

edly found that failure on the part of the shipper to ask for the application of the rule, by the publication, on one day's notice, of the lower rates in effect from the more distant points, did not deprive the shipper of the benefit of the lower rates.

It found that the applicable rates from points in the western group were those contemporaneously in effect from Cameron and Monmouth and that the rates from the central group were unreasonable to the extent they exceeded the rates from Cameron and Monmouth. It awarded reparation on that basis.

TON OF STRAW—\$250

A ton of wheat or oat straw at one time was just a ton of straw with no value other than bedding for cattle or covering for plants during the cold season. Now a chemist, George H. Harrison, has discovered a process through which this ton of straw may be turned into products valued at \$250.

The straw is burned and the smoke utilized. From it is obtained 1,600 pounds of solids including a new germicide, a roofing and damp-proofing paint and a fly spray.

"There is hardly any limit to the products that may be derived," said Mr. Harrison. "When the process has grown up to its possibilities every farmer who grows grain will see the difference. Even now, if you would take me to a farm and offer me the grain or the straw I would take the straw. Potentially it is the more valuable."

DAIRYMEN'S CONFUSION IN BUYING ALFALFA DUE TO USE OF GENERAL TERMS IN ORDERS

Complaints of many dairymen in Wisconsin, Iowa, Illinois, Indiana, Ohio, and Minnesota, that their orders for Alfalfa are improperly filled by shippers in Michigan, Nebraska, Kansas, eastern South Dakota, eastern Colorado, and Wyoming, indicate that in most cases the dairymen are using indefinite descriptive terms in placing their orders, the Bureau of Agricultural Economics, United States Department of Agriculture, has announced.

General specifications in orders such as "good feeding Alfalfa," "choice," or "pea green leafy Alfalfa," either may be interpreted differently by shippers and buyers, or make possible deliberate misrepresentation, the Department says. In either case controversies and rejections often arise that are costly to both shippers and buyers. Use of Federal grades and inspection are advocated to correct the situation.

Dairymen require leafy well-cured Alfalfa with high protein content and high palatability. Being unable to obtain the quality of Alfalfa wanted, they frequently buy protein in the form of mill-feeds which are relatively high in price and which Department experts declare are not a complete substitute in feeding for a protein forage such as Alfalfa.

The Federal hay standards are based upon definite color and foreign material specifications, and, in case of Alfalfa, for leafiness also. The grade U. S. No. 1 Alfalfa means a type of hay that is 60 per cent or more natural green, 40 per cent leafy, and which does not contain over 5 per cent of foreign material and 5 per cent grasses. The specifications are definite and can be definitely interpreted and applied by Federal inspectors to determine controversies and disputed contracts. The grades portray types of hay commonly produced, and provide a common language for all people to use who produce, buy, sell, and feed hay.

Inspection of hay moving in interstate commerce is not compulsory under such laws as prevail for

grain, although 18 states have adopted the Federal standards as official state standards. A Federal hay inspection service is conducted by co-operation with many states, commercial exchanges, shippers' organizations, and farm bureaus, on a voluntary basis, the Department of Agriculture maintaining supervisors' offices at Washington, D. C., Atlanta, Chicago, Kansas City, Salt Lake City, and San Francisco.

Direct shipments of Alfalfa to dairymen in Wisconsin, Iowa, Illinois, Indiana, Ohio and Minnesota, have been made possible under United States standards and Federal inspection from Kansas City, Mo.; Chicago; Powell, Wyo.; Garden City, Kan.; and Lexington and Kearney, Neb.; where Federal hay inspectors are located and where hay dealers and co-operating marketing associations will take orders on the basis of Federal grades.

The grades of Alfalfa best suited to dairy feeding are U. S. No. 1 Alfalfa and U. S. No. 2 Alfalfa (leafiness good enough for U. S. No. 1). Orders based on these definite grades with request that a Federal hay certificate be attached to the invoice by the shipper will assure the delivery of good hay. Should a dispute arise, a Federal inspector may be called in to determine the facts. Buyers are advised that the prices on these U. S. grades of Alfalfa are somewhat higher than on "common run" of hay not officially inspected. The shippers cannot load the best grades at "common run" prices. Bargain prices on uninspected hay do not often accompany hay of the best grades for dairy feeding.

This direct marketing of Alfalfa is reported to be growing to considerable proportions in the Platte River Valley of Nebraska, where farmer producers of Alfalfa have formed an association and are selling to the dairy states of Wisconsin, Minnesota, and Iowa. Shippers in all the producing states named are desirous of making contacts with dairy associations and individual dairymen.

Information about Federal Hay Inspection and hay supplies may be obtained from Federal Supervisors, E. O. Pollock, 1513 Genesee Street, Kansas City, Mo.; H. H. Whiteside, Room 1209, 139 North Clark Street, Chicago, Ill.; and also from County Agricultural Agents, A. R. Hecht of Lexington, Neb.; J. L. Worrell, Kearney, Neb.; and F. A. Chisholm, Cody, Wyo.

FOUR-WAY EXPANSION NOTED

A bright picture is painted for the livestock industry, and consequently for the feed industry dependent on the former, by the United States Department of Agriculture in its first 1927 report. The dairy industry is reported to have had a favorable spread between feed and milk price, and this bodes well for the dairy feed merchants.

Poultry producers were also relatively prosperous, says the report, while hog producers had the most advantageous spread between corn and hog prices in several years, in spite of the cholera in many sections.

"Cattle feeders did not have a very profitable experience last winter," according to the survey, "yet the movement of cattle into the Corn Belt up to December 1 indicated about as large a volume of feeding this winter as last. Range cattlemen appear optimistic. The number of sheep and lambs on feed on December 1 apparently exceeded last year's number by at least 200,000 head, the increase being in the Corn Belt with a heavy decrease in Colorado. The recent pig survey covering 11 Corn Belt states indicates only about 4 per cent increase in the fall pig crop, less than 1 per cent increase in the total 1926 pig crop, no increase in the 1927 spring pig crop, and a probable decrease in hog slaughter during the marketing year 1926-27."

Old St. Louis Firm Equips New Plant For Gluten Feed Manufacture

Processing of Corn Feed Raises Protein Content 14 Per Cent Above
That of the Whole Corn

AMONG the most important of the 110 individual buildings, covering an area of 142 acres or 70 city blocks, which comprise the Anheuser-Busch plant at St. Louis, Mo., are the feed mill and grain elevator structures where the Anheuser-Busch Corn Gluten Feeds are produced. The wide distribution of this brand of feeds through elevators and other dealer agencies in the Middle West, is traceable directly to the careful system of manufacture employed in the production of these feeds.

The tile and concrete grain storage units at this St. Louis plant have a total capacity of 1,750,000 bushels. The inspection and care of this volume of grain is a task of first importance, and to insure the absolute efficiency of this work is a Zeleny Thermometer System. The whole feed plant of the Corn Products Department of Anheuser-Busch, Inc., was outfitted by the Essmuller Mill Furnishing Company, St. Louis, Mo., and from a trip

it so palatable for poultry and stock. Any feed must be palatable before either poultry or stock will eat it in sufficient quantities to produce the expected amount of milk, meat or eggs. The guaranteed minimum protein content of the Anheuser-Busch Brand of Corn Gluten Feed is 23 per cent; minimum carbohydrate content, 50 per cent; maximum fibre content, 8.5 per cent, and maximum fat content, 2 per cent. It is to be noted that due to the processing in this St. Louis mill, the feed produced, with its 23 per cent protein, has 14 per cent more protein than whole corn.

Ten grain separators, manufactured by the S. Howes Company, Silver Creek, N. Y., perform the first function in transforming the incoming corn into a scientific feed. Three burr mills, and 10 regular type mills receive the cleaned grain, and two attrition mills are also used in this department. One is a 24-inch machine, and the other a 30-inch Sprout Waldron Feed Mill. An elabor-

crop correspondents covering the area grown, the percentage of the total from which beans or peas are gathered, and bushels actually gathered per acre.

The total soybean area for all purposes is estimated at about 2,602,000 acres in 1926 against 2,237,000 acres in 1925, and the total area of cowpeas at about 2,603,000 acres, against 2,146,000 acres.

Velvet beans for all purposes were grown on about 1,391,000 acres against 1,627,000 acres in 1925, but production is estimated at 592,000 tons in the pod against 438,000 tons. These figures are for the entire production of velvet beans and not merely for those gathered.

Reporters state that velvet beans in the hull are gathered from only a quarter to a third of the acreage, the remainder being grazed by livestock or turned under for soil improvement. Most of the beans gathered are ground with the pods for livestock feed, only enough being shelled out to supply the demand for seed.

"WHITE GOLD" AS A SIDELINE

By RALPH HEYWOOD

Country grain station owners who carry salt as a sideline can increase their sales of this product by 50 or 75 per cent, if they will only inform themselves of salt's great feeding virtues, and then pass on this information by word of mouth, or by small newspaper advertisements, to the farmers in their territories.

Salt is white gold in the most efficient of our mineral mixtures. It is of vital importance in economic livestock production. Its absence from the ration of the pig very often results in changing an otherwise profitable feeding venture into a losing proposition.

Pigs need salt just the same as does the milking cow, the sheep, the steer, or the horse. Yet it is surprising that hundreds upon hundreds of swine raisers believe that salt is poisonous to swine, and religiously these folks keep salt away from their hogs. This is a losing business.

When the hog does not get his proportionate share of salt, he suffers from the nutritional deficiency, making poor gains meanwhile, requiring more feed for the pound of gain than would be necessary in the presence of an optimum salt allowance.

Of course salt is poisonous to hogs as well as to other kinds of livestock if it is forced upon them in too large quantities. If one starves his hogs for salt, and perhaps for tankage, and then allows them to have access to salty brine poured from the cured meats, then trouble may be expected because the pig on catching the meaty and savory odor from the deadly liquid little suspects that danger lurks in the excessive salt carried therein, and so he may drink too much, overdo the salt, and undergo salt poisoning.

In case the pigs have been off of salt for some time it is wise to "make haste slowly", getting the animals back on salt by degrees rather than suddenly. We have found the block salt an efficient form for self-feeding. And salt is best self-fed if the top results are to be expected and secured from its use.

THE HAY AND PASTURE OUTLOOK

There is no prospect for a nation-wide increase in hay requirements in 1927 due to the fact that the number of hay consuming animals in the United States continues to show a downward trend. Average yields on an acreage equal to that of last year would produce a crop approximately 5,000,000 tons larger than the crop of 1926. Such a crop would be ample for prospective requirements even though the carryover of old hay will probably be smaller than a year ago. Hay prices are only slightly higher at the present time than two years ago, when the supply was the largest on record, notwithstanding the fact that the domestic supply, including farm stocks, for the past two seasons averaged about 10 per cent less than for the three preceding seasons. If an average yield, therefore, is secured throughout the country on an acreage equal to that of last year in 1927 farmers in general



VIEW OF THE PLANT OF ANHEUSER-BUSCH, INC., ST. LOUIS, MO., SHOWING GRAIN STORAGE

through the South St. Louis plant at 721 Pestalozzi Street, one gains the impression that no department of this feed manufacturing establishment has been slighted in any mechanical detail. Morse Silent Chain Drives are used for power transmission.

To develop power for operating the feed plant and the many other departments of the Anheuser-Busch business, several different power installations have been made. There are six oil engines of the Busch-Sulzer make, rated at 350 kilowatts, and four steam engines driven from 25 steam boilers of 500 horsepower each. From the above equipment, drives of chain and some of rope type are run, while from two 500-kilowatt motor generators power is obtained to run the 1,100 electric motors scattered over the 140-acre plant.

August A. Busch is president of the corporation, of which the Corn Products Department is an integral part; Adolphus Busch III is first vice-president; E. Magnus, second vice-president; E. Anheuser, third vice-president; W. F. Anheuser, fourth vice-president; and R. A. Huber, fifth vice-president and treasurer. The post of head miller is filled by Ernst Busch.

The good color and pleasant odor of Anheuser-Busch Corn Gluten Feed is due to steam-drying. This operation, for which there is ample equipment, also gives that rich, roasted effect that makes

ate belt conveying system as well as a spiral chute arrangement have been worked out to handle the feeds going to and from the packers. There are 60 automatic scales in the Busch plant, many having been purchased from Fairbanks, Morse & Co., Chicago, Ill. Other weighing equipment includes four track scales and 20 hand scales.

The 50-car warehouse has special labor saving devices of its own, including the conveyors running out from the mill and three portable pilers.

The testing of the grain and feeds is taken care of in the general laboratory of Anheuser-Busch, Inc., but the corn gluten product is under constant examination at another location, where most rigid tests are carried on continuously. This is at the Busch experimental farm near St. Peters, Mo.

SOYBEAN, COWPEA AND VELVET BEAN CROPS INCREASE

Increased production of soybeans, cowpeas and velvet beans during the past year, as compared with 1925, is reported by the United States Crop Reporting Board, based on returns from growers.

About 6,517,000 bushels of shelled soybeans were produced compared with 5,102,000 bushels in 1925, and cowpea production is estimated at 7,484,000 shelled bushels against 4,214,000 bushels in 1925.

These figures are for quantities actually harvested, the estimates being based upon reports of

are likely to receive lower prices for the hay which they have to sell the coming season.

Weather conditions in 1926 caused regional surpluses and shortages of hay that will have a marked influence on local prices until the new crop is available. Drought in Minnesota, Iowa, North Dakota, South Dakota, Nebraska and Kansas, reduced the yields of all kinds of hay materially and necessitated the purchase of hay from other regions for stockyard, farm and city consumption. Clover production was greatly reduced in the important Clover area east of the Mississippi where the hot, dry summer of 1925 was extremely hard on spring sowings and where subsequent winter killing occurred. As a result Clover hay commands unusually high market prices in the Northern States east of the Mississippi where there is an urgent demand for dairy hay and where freight rates restrict the purchase of western Alfalfa. In the northeastern part of the United States, hay prices are ruling higher than a year ago because of slightly reduced production and because smaller supplies are available for import from Canada.

In the Southern States favorable weather and some increase in acreage resulted in the production of a crop of all kinds of hay considerably greater than the short crop of 1925. Furthermore liberal supplies of relatively cheap cottonseed meal and hulls from the record cotton crop of 1926, together with a good harvest of southern grown feed grains, are available this season for feeding purposes. Largely as a result of these conditions the Southern States are not purchasing either Timothy from the North or Alfalfa from the West and Southwest in such large amounts as last season. In fact, small surpluses of hay are available for shipment at some points in the South. In the Mountain and Pacific Coast States almost as much hay was produced as in 1925 and the crop is generally adequate for current requirements.

The present trend in the market demand for hay is toward increased requirements of legume hay for dairy feeding and decreased requirements of Timothy and other grass hays for horse feeding. There is a strong and constant dairy demand for the best grades of Alfalfa and Clover hay in the Eastern and Southeastern States. Farmers who are producing as a cash crop and for shipment into these districts may profitably replace Timothy acreage with Alfalfa or Clover acreage wherever soil and climatic conditions are favorable. While relatively high freight rates continue to restrict a heavy movement of hay for long distances this obstacle may be met in part by producing and shipping uniformly loaded cars of the best grades of hay which will command prices sufficiently high to offset the high transportation costs.

So far as market hay is concerned a general increase in acreage is not justified. Demand for baled hay is not likely to increase during the coming season unless an unexpected shortage of hay production over an extensive region should necessitate increased inter-regional shipments to meet urgent requirements for work stock, breeding stock and dairy cattle. An additional acreage of Alfalfa in the West for a cash crop would not yield profitable returns as the present acreage is more than sufficient for prospective market demands. Similarly in the Timothy areas of the Middle Western and Eastern States an increase of acreage is inadvisable as the Timothy acreage is now sufficient to meet the market demands.

Farmers throughout the country, however, should give consideration to the fact that productive hay and pasture acreage is of material importance in keeping livestock production costs at a minimum and in maintaining soil fertility. Old meadows of Alfalfa or Timothy and Clover that are weedy and grassy are relatively unproductive of good hay for either farm feeding or market purposes and should be replaced with newly seeded acreage. In regions where the carryover of hay will be small this spring some increase in acreage is advisable to replenish farm reserves. The chronic shortage of high quality Alfalfa, Clover or other legume hays for dairy feeding in the East and Southeast suggests an increase of their acreage in substitution for non-

legume hay acreage, the production on which does not greatly interest feeders.

In areas where it is desirable to reduce the acreage of feed grains such acreage may be seeded down for pasture or soil improvement purposes. Additional pasturage would lower the costs of livestock production and utilize land that might otherwise be idle. Crops sown for soil improvement purposes, even if livestock are not available to pasture the land, would yield future income through increased soil fertility. The relatively low prices for Alfalfa, Sweet Clover, Lespedeza and soybean seed suggest the seeding of Alfalfa, Lespedeza or soybeans for hay, Sweet Clover for pasture, and Sweet Clover or soybeans for plowing under in many localities.

KANSAS CITY HAY MEN ELECT

At the recently held election of the Kansas City Hay Dealers Association, D. B. Tilson, president of Dyer & Co., hay and grain dealers was elected president. The other officers are: G. Stuart Brubaker, first vice-president; George E. Curtis, second vice-president; Earl H. Cash, Lloyd M. Faris and C. S. Scott directors.

ALASKA FORAGE

Experiments conducted by H. W. Alberts, director of the demonstration farms in Alaska, tend to show that Alaska livestock will eat Alaska hay in winter as well as summer. He feels that Alaska can be made self-supporting in agriculture and animal industry.

At the present time cattle in that territory are fed oat hay, Clover and other roughage shipped from Canada and the United States. Wild red-top, a native grass, grows to a height of six feet and is very dense in parts of the Susitna Valley. The principal objection to native hay has been its lack of nutrition due to rapid growth under the midnight sun and the great amount of moisture in the soil.

NEW FEED BRANDS

"OMEGA" mill feeds. H. C. Cole Milling Company, Chester, Ill. Filed December 14, 1926. Serial No. 241,473. Published February 15, 1927.

"HOMCO" mill products, namely hominy feed consisting of hulls and small black particles

VI-TASI-LAC MASONIZED



ground, bolted and kiln dried for use as stock, dairy and hog feed. Decatur Milling Company, Decatur, Ill. Filed July 13, 1926. Serial No. 234,467. Published February 15, 1927.

"PRODUCTO" poultry feed and dairy feed. Peoples Milling Company, Muskegon, Mich. Filed July 31, 1926. Serial No. 235,418. Published February 15, 1927.

"Y-O" vitamins compound for poultry and livestock to be administered alone or mixed with other foods. The G. E. Conkey Company, Cleveland, Ohio. Filed December 16, 1926. Serial No. 241,562. Published February 15, 1927.

"VI-TASI-LAC" self-preserving feed product of semi-solid consistency made from malted grain. William Grelick, St. Paul, Minn. Filed October 23, 1926. Serial No. 239,105. Published February 22, 1927.

Medicated mineral feed. Shores-Mueller Com-

any, Cedar Rapids, Iowa. Filed August 20, 1926. Serial No. 236,231. Published February 22, 1927.

"MASONIZED" hays and ground feeds. Mason Alfalfa Process Company, Philadelphia, Pa. Filed January 5, 1927. Serial No. 242,383. Published March 1, 1927.

Not Subject to Opposition

"YORKSHIRE" poultry and stock feeds. John Morrell & Co., Ottumwa, Iowa. Filed April 29, 1926. Serial No. 230,892. Published and registered March 1, 1927.

Trademarks Registered

223,861. Stock feeds. Hubbard Milling Company, Mankato, Minn. Filed September 1, 1926. Serial No. 236,752. Published November 9, 1926. Registered February 15, 1927.

223,923. Feed for poultry and livestock. Geo. G. Ruppertsberger & Sons, Inc., Baltimore, Md. Filed October 1, 1925. Serial No. 221,076. Published November 30, 1926. Registered February 15, 1927.

223,936. Mill feed and bran. The Continental Milling Company, Ellicott City, Md. Filed August 12, 1926. Serial No. 235,883. Published November 16, 1926. Registered February 15, 1927.

223,967. Scratch grains, dairy feed and egg mash. The Mennel Milling Company, Toledo, Ohio. Filed September 24, 1926. Serial No. 237,682. Published November 9, 1926. Registered February 15, 1927.

224,012. Poultry food. The Dry Milk Company, New York, N. Y. Filed October 8, 1926. Serial No. 238,307. Published November 16, 1926. Registered February 15, 1927.

224,013. Prepared food for rabbits. Marcellus W. Meek, Arcadia, Calif. Filed October 5, 1926. Serial No. 238,185. Published November 16, 1926. Registered February 15, 1927.

224,046. Poultry food. California Milk Mineral Company, Gustine, Calif. Filed July 2, 1926. Serial No. 234,023. Published November 30, 1926. Registered February 15, 1927.

224,115. Feed for livestock. Leonora M. McClung, doing business as Gro-Mor Feed Products Company, Omaha, Neb. Filed August 30, 1926. Serial No. 236,652. Published November 30, 1926. Registered February 15, 1927.

224,130. Stock feed. Alfocorn Milling Company, St. Louis, Mo. Filed December 8, 1919. Serial No. 125,677. Published February 24, 1920. Registered February 22, 1927.

224,731. Cereal and cereal products intended for use as poultry feeds. Black & White Milling Company, East St. Louis, Ill. Filed August 19, 1925. Serial No. 219,056. Published July 6, 1926. Registered March 1, 1927.

Trademark Registrations Renewed

29,883. Preparations of different grains and their by-products for stock food. Registered April 20, 1897. The American Cereal Company, Akron, Ohio; Chicago, Ill.; and Cedar Rapids, Iowa. Renewed April 20, 1927, to The Quaker Oats Company, Chicago, Ill., a corporation of New Jersey, assignee. Registered February 8, 1927.

62,487. Poultry food. Registered May 7, 1907. Saginaw Milling Company, Saginaw, Mich., a corporation of Michigan. Renewed May 7, 1927. Registered February 15, 1927.

58,903. Food for poultry. Registered December 25, 1906. Samuel K. Strickler, Mifflinburg, Pa. Renewed December 25, 1926. Registered March 1, 1927.

ROCK PHOSPHATE NOT A SUBSTITUTE FOR BONE MEAL

Because of the relative cheapness of rock phosphate or floats, allowances of this material have been tried as a source of lime and phosphorous for animal feeding, and some success was apparently obtained in early experiments. Recent studies, though, indicate that floats are not a satisfactory substitute for bone meal as a source of lime and phosphorous in animal nutrition.

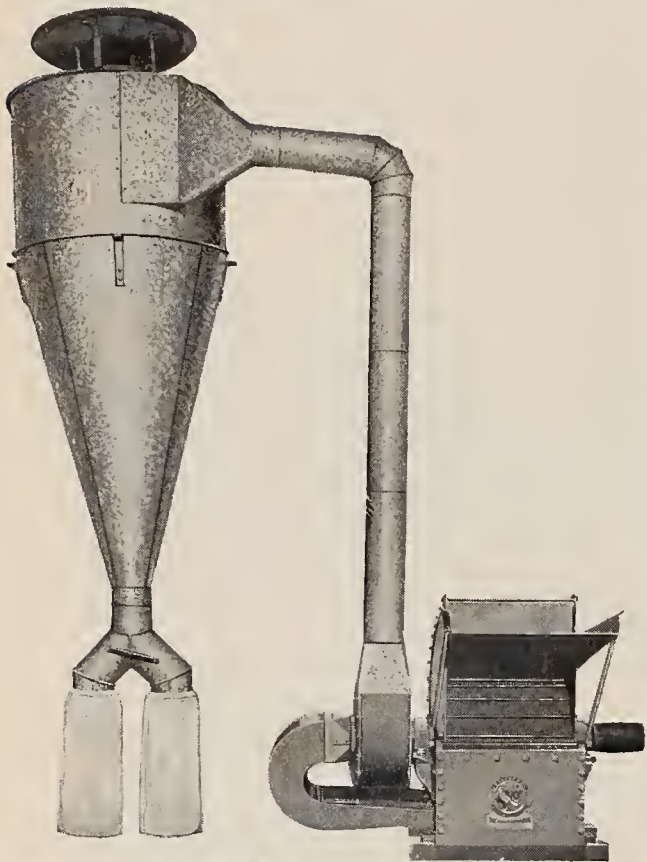
The reason for the evident failure of rock phosphate in this respect, is not altogether clear. It has been suggested that the failure may be due not to the lack of lime but to the presence of fluorine, an element commonly associated with rock phosphate.

STEEL CONSTRUCTION FOR PERMANENCE

The one big outstanding feature of the "Jay Bee" mill is its absolute dependability under all conditions. Zeigler Bros., Oakley, Kan., say, "We never have a breakdown. Our 'Jay Bee' has never failed us in any particular at any time. It produces a superior quality of food. Its capacity is unequalled by any other mill. Its sturdiness of construction safeguards against costly breakdowns. No thinking man can hesitate long before becoming an owner of a 'Jay Bee' mill."

The "Jay Bee" grinds any hay, roughage, or grain as fine as you want it ground, at a lower cost per ton than any other mill. It has no knives, gears, burrs, no breaker plates to wear dull or break—or heat the grain in the grinding. No feed value is lost because the ground material comes out just as cool as when it entered. Excessive heating of grain will reduce the value of the vital food elements, particularly the vitamins. This trouble will never occur when feed is ground on the "Jay Bee" because the "Jay Bee" does not even warm the feed.

Manganese steel hammers revolving at high speed, with a crushing force of 3,000 pounds behind



"JAY BEE" STANDARD BELT DRIVEN MILL COMPLETE WITH FAN, COLLECTOR AND SACKER

each hammer per revolution, grind the material in suspension. The hammers are slotted and reversible, giving hammer free play on its support bolt. Should any foreign material, as rock or metal, enter the mill with the feed, there is no damage done to the mill, as the slotted hammer that strikes the rock or metal can swing back and leave a clearance of about three and one-half inches between the hammer and screen. This prevents damage to any part of the mill. There are no burrs, gears, knives, or plates which such a circumstance would smash in an instant.

Heavy perforated steel screens from $\frac{3}{4}$ -inch to $1\frac{1}{2}$ -inch permit grinding to any degree of fineness. These screens can be changed in about two minutes so that practically no time is lost when changing from fine to coarse grinding.

Ball bearing construction of the mill, with Alemite lubrication, and the system of hammers, make the "Jay Bee" the lowest cost operating mill on the market. It is in sizes and styles to meet every grinding requirement. The "Jay Bee" Humdinger, made in four sizes for engines 7 hp. to 30 hp., is the ideal farm mill. The No. 3, or large size, "Jay Bee" Humdinger, is also suitable for small milling plants. The "Jay Bee" Standard belt drive mill in five sizes for 20 hp. to 75 hp., and the "Jay Bee" Standard Direct Connected mill (motor attached to shaft of mill) in two sizes for 30 hp. and 50 hp., are the ideal mills for small or large milling plants.

Over 5,000 owners have proved to their own satisfaction that the "Jay Bee" mill is the most economical mill to buy—from the standpoint of fine grinding and as a trade builder.

Manufactured by the Bossert Corporation, Utica, N. Y., one of the oldest and largest plants in the world specializing in light and heavy stampings from steel, brass, aluminum, and other metals, it is distributed by J. B. Sedberry, Inc., Utica, N. Y.

THE GRAIN MARKET SITUATION

By G. A. COLLIER

Grain, Hay and Feed Market News Service, U. S. Bureau of Agricultural Economics

While the grain market was rather unsettled during the latter part of February and the first half of March, prices of most grains were not materially changed. Corn declined about five cents per bushel but wheat, rye, oats and barley at this writing (March 10) are quoted within a fraction of a cent of the prices prevailing a month ago. The export demand for wheat has continued of moderate volume but domestic demand has been slow. Stocks of corn in commercial channels have continued to increase and are a depressing factor in the market. The scarcity of high grade oats has strengthened the market for that commodity while prospects of an increased demand later in the season for rye has given the rye market some independent strength.

According to the estimate of the United States Department of Agriculture stocks of wheat on farms March 1 were about 30,000,000 bushels larger than at that time a year ago. Stocks in country mills and elevators and in commercial channels are also larger than a year ago, making the total supply of wheat on March 1 in the United States about 55,000,000 bushels larger than on March 1, 1926. Exports of wheat including flour since the first of July have totaled around 167,000,000 bushels or nearly 100,000,000 bushels more than for the same period last year.

From March to June last year net exports totaled about 33,500,000 bushels and the carryover on farms, in country mills and elevators and in the principal markets totaled around 60,000,000 bushels. If the carryover next year is equal to the average for the past five years and domestic consumption and imports are equal to those for this period last year around 60,000,000 bushels will be available for export until the new crop comes onto the market July 1. Exports during the past two months have averaged around 15,000,000 bushels each month.

The consumption of wheat by mills to the first of February was about 14,000,000 bushels larger than for the same period last year and while mills report a continued dull demand for flour monthly millings during January were only slightly below those of last January. Export demand for wheat is likely to continue of moderate volume as the European supply of bread grains is nearly 360,000,000 bushels smaller than last year and considerable United States wheat will be needed to mix with the soft wheats and lower grade grain being received from other exporting countries.

Argentine shipments have continued large and since the first of January totaled more than twice the amount exported during that period last year. Australian exports are about the same as last year. The amount of wheat remaining for export at Argentina is now only about 14,000,000 bushels more than remained in that country at this time a year ago. It is estimated that around 50,000,000 bushels more wheat remains for export from Australia, however, than at this time a year ago. The wheat on ocean passage is about 20,000,000 bushels larger than at this time last year but these new crop shipments from the Southern Hemisphere are now arriving in European markets and are being well absorbed at firm prices.

Foreign wheat markets have been relatively firmer than the domestic markets. Liverpool May wheat has advanced six cents per bushels during the past month. Buenos Aires prices have also advanced slightly. The advance at Liverpool has been reflected in the Winnipeg market, where May wheat

has advanced five cents per bushel during the past month. While the supply of wheat in the United States is considerably larger than last year, prices of Hard Winter wheat are on an export basis and any advance in European markets should be a strengthening factor in the domestic situation. At the present time United States Hard Winter wheat is being quoted in Liverpool at around \$1.60 per bushel compared with \$1.53 per bushel for Argentine wheat and \$1.69 for best grades of Canadian wheat.

SUPPLY OF FEED GRAINS MUCH BELOW LAST YEAR

According to the estimate of the United States Department of Agriculture of stocks of feed grains, on farms it appears that the supply of feed grains, including corn, oats, and barley, is around 380,000,000 bushels smaller than at this time last year. Stocks of corn, including the amount on farms and in the principal markets, are about 194,000,000 bushels smaller than a year ago. The supply of oats is nearly 170,000,000 bushels below that of last year and barley about 16,000,000 bushels smaller than on March 1 a year ago. The smaller supply of oats and barley has been reflected in a relatively firm market for these grains during the past month. The poor commercial demand for corn, however, and the large stocks which have accumulated in the terminal markets, particularly Chicago, have been a depressing factor in the corn market and the sharply reduced stocks on farms have apparently had but little influence as a market factor.

While the large crop of corn in the southern states has restricted the demand from that territory in the corn belt, it has apparently resulted in increased consumption of this grain in the southern and southeastern states. Notwithstanding the smaller number of animals on farms this year, around 70,000,000 bushels more corn has been consumed or otherwise disposed of to the first of March than during the first four months of the 1925-26 crop year. Exports have been relatively unimportant and have totaled only a little over 8,000,000 bushels compared with about 12,000,000 bushels for the corresponding time last year. The total supply of corn March 1 was only about 21,000,000 bushels more than was used last year from the first of March to the first of November. The carryover last year was larger than usual.

The demand for corn in the markets has not been equal to the current offerings although total receipts at the principal markets have been about 20 per cent less than last year. Stocks have steadily increased and now total over 50,000,000 bushels in the markets reporting to the United States Department of Agriculture. While prices have declined for the month they have advanced from the low point reached toward the last of February and the market appears to have developed a slightly firmer tone.

OATS MARKET FIRM

While the total supply of oats at the beginning of the present crop year was around 200,000,000 bushels less than at the first of the previous year, consumption has been only a little less than last year since the first of August with the result that stocks on farms have been reduced nearly 150,000,000 bushels below last year's stocks on March 1. A larger percentage of the crop than usual was of poor quality and the effective market supply has been even smaller than the statistics indicate. The poor demand for corn has had a depressing influence on the oats market and prices have held steady, heavy weight dry oats bringing several cents premium over the ordinary grades. The winter oats in the South are reported to be in good condition although recent cold weather in that territory has checked growth. The seeding of Spring oats has made rather slow progress because of wet soil but some have been planted in the Great Plains States as far north as Kansas.

The supply of barley on March 1 was about 44,500,000 bushels compared with a little over 61,000,000 bushels a year ago. The shortage of other feed grains in some of the North Central States has materially increased the consumption of barley in that territory.

ASSOCIATIONS

CONVENTION CALENDAR

March 22-23.—Annual meeting of the Missouri Farmers Grain Dealers Association, at Kansas City, Mo.

March 24-25.—Thirtieth annual meeting of the Kansas Grain Dealers Association, at Topeka, Kan.

March 24-25.—Annual meeting of the Oklahoma Farmers Grain Dealers Association, at Enid, Okla.

March 29-31.—Annual meeting of the Kansas Farmers Grain Dealers Association, at Hutchinson, Kan.

April 8-9.—Meeting of the California Hay, Grain and Feed Dealers Association, San Francisco, Calif.

May 3-4.—Thirty-fourth annual meeting of the Illinois Grain Dealers Association, at the Hotel Jefferson, Peoria, Ill.

May 23-24.—Annual meeting of the Texas Grain Dealers Association, at the Baker Hotel, Dallas, Texas.

June 9-11.—Annual convention of the American Feed Manufacturers Association, at the French Lick Springs Hotel, French Lick, Ind.

June 27-28.—Annual convention of the Wholesale Grass Seed Dealers Association, at Detroit, Mich.

June 28-30.—Annual convention of the American Seed Trade Association, at the Book-Cadillac Hotel, Detroit, Mich.

July 25-27.—Thirty-fourth annual convention of the National Hay Association, at St. Louis, Mo.

October 10-12.—Annual convention of the United States Feed Distributors Association, at Omaha, Neb.

October 10-12.—Annual convention of the Grain Dealers National Association, at the Fontenelle Hotel, Omaha, Neb.

KANSAS DEALERS PLAN MEETING

The annual meeting of the Kansas Grain Dealers Association will be held in Topeka, Kan., March 24 and 25, according to Secretary E. J. Smiley's Bulletin No. 136. The organization shows signs of steady growth and increasing value, having added no less than 85 new members to its roll call during the past year; and plans are going forward for a more than ordinary annual meeting. Quite a number of the members have requested that arrangements be made for an excursion trip to New Orleans and Havana, as well as other points of interest in Cuba. According to last reports plans were being made for such a trip. Regardless of the entertainment features, the attending of the business meeting should be well worth while to all grain men who are eligible and can be present at Topeka.

FARMER DEALERS OF ILLINOIS MEET

The Farmers Grain Dealers Association of Illinois held its twenty-fourth annual convention at Jacksonville, Ill., on February 8, 9 and 10. Referring to the apparent overlapping of the activities of grain dealers with the Illinois Agricultural Association wheat pools, brought to the attention of the convention by Charles T. Peavey, of Chicago, resolutions advised strict adherence to the policy on which the Association was organized, that of co-operative marketing. Any direct competition among the various farm organizations was discouraged.

A plan to form a terminal marketing company to be known as the National Farmers Elevator Company, co-operative, was heartily indorsed and every local co-operative elevator company in the association was urged to get behind the movement. The goal to secure every farmers' elevator in the state as a member of the Illinois association also was set.

Outlining the history of the Illinois Farmers Grain Dealers Association, founded in 1903, Secretary Farlow said at the end of the first year the organization had 30 member companies with about 2,400 stockholders handling 7,500,000 bushels of grain. Since that time the number of companies has increased to 507 with elevators at 600 stations. These companies represent 60,000 farmer stockholders and \$10,000,000 invested in elevators and equipment. The elevators are handling 125,000,000 bushels of grain annually, while the sideline business has grown to about \$15,000,000 a year. The total business turnover for farmers' elevators in Illinois for 1926 was approximately \$100,000,000, Mr. Farlow said.

The following report of the Nominating Committee was unanimously adopted and the officers

elected: We, your Nominating Committee, beg leave to submit the following report. We have seen fit, in our judgment to digress slightly from the custom of previous years in the matter of promotion of vice-presidents and submit our report as follows: President, D. H. Allen; first vice-president, C. H. Bonnell; second vice-president, T. R. Cain; treasurer, W. H. Hindahl; director No. 2, J. A. Henebry, Plainfield; Director No. 5, F. W. McLaughlin, Ashland.

OHIO FARMER DEALERS MEET

N. G. Bennett, McComb, was elected president of the Farmers Grain Dealers Association of Ohio February 23 at the closing session of the organization's twelfth annual convention in the Waldorf Hotel. The first convention of the Association was held in Toledo 12 years ago. At that time 22 elevators were owned and controlled by farmers in the Association. Now there are 280. Other officers selected were William Horn, Castalia, first vice-president; R. C. Schmunk, Rocky Ridge, second vice-president; and Oral Cole, Jenera, Osceola Schlosser, Fostoria, and L. J. Winch, McClure, directors for three years.

Speakers were O. W. Cole, Jenera; M. M. Perkins, Valley City; R. C. Schmunk, Rocky Ridge; F. C. Sparks, Tiffin; George Tawney, Gallup Prentiss; N. G. Bennett, McComb; C. C. Wolfe, Fremont; L. R. Forsyth, Prairie Depot; B. J. Burket, Oak Harbor; Alexander Lindsey, Blissfield, Mich.; L. G. Schraub, Peoria, Ill.; B. A. Wallace, Columbus, and W. R. Tabbert, Toledo.

The Rev. Stephen K. Mahon, pastor of Epworth M. E. church, was the principal speaker at the banquet in the Waldorf Hotel. Jesse Hurlbut was toastmaster. Other speakers at the Tuesday sessions were H. W. Applegate; R. E. Croninger, Grand Rapids; Allen G. Phillips, Fort Wayne; Phil Sayles, Columbus; L. E. Foster, Columbus; J. W. Shorthill, Omaha, and Judge Palmer, Defiance.

INDIANA FARMER DEALERS CONVENE

On February 24 and 25, the twelfth annual meeting of the Indiana Farmers Elevator Association was held at the Claypool Hotel, Indianapolis, Ind. Many of the 200 grain dealers and managers of farmers' elevators visited the state assembly and the Indianapolis Board of Trade preceding the opening of the convention.

Speakers on the afternoon program included E. G. McCullum, of Indianapolis, secretary of the Association; Professor Mervyn Crobaugh of Indiana University; H. R. Kraybill, state chemist and seed commissioner; E. C. Barrett, vice-president of the Indianapolis Board of Trade; and Samuel Holden, chief inspector on the trading floor of the Indianapolis Board of Trade.

"Our Present Problems, Legislative and Otherwise," was the subject of an address made by J. W. Shorthill, of Omaha, secretary of the national association, at the banquet Thursday night.

The Indiana Farmers Elevator Managers Association had charge of the Friday forenoon program. J. T. Buchanan, of Hebron, president, and Virgil Cowan of Raber, secretary-treasurer, made reports. W. J. Kuhrt, of the co-operative marketing department in Washington, spoke.

M. P. Hill of Francesville was re-elected president of the Farmers Grain Dealers Association of Indiana. Other officers re-elected were Mathew Maroney, Lucerne, and Samuel Foster, Otterbein, vice-presidents; E. G. McCullum, Indianapolis, secretary; and William F. Hagen, Chalmers, treasurer.

EASTERN FEED MERCHANTS HOLD MEETING

The mid-winter convention of the Eastern Federation of Feed Merchants, in Binghamton, N. Y., was attended by more than 200 people. The meeting occurred February 22 and 23, and is recorded as one of the most successful in the history of the organization. Dr. E. A. Perregaux, of the New York State College of Agriculture, spoke on operating costs, basing his report on a survey conducted in 1924 of 70 retail stores, some of which were co-operative enterprises, all situated in New York State. It was possible to make up balance sheets at the beginning and end of the year for 54 stores, and complete operating statements of the year's business for 47 of the 70 stores.

The average investment of the 54 stores was

\$35,275.44, of which 76 per cent was in current assets and 24 per cent in fixed assets. Cash made up 8 per cent; accounts and notes receivable, 38 per cent; merchandise inventory, 29 per cent; and other current assets, 1 per cent of the total. The fixed assets were furniture and fixtures, 1 per cent; delivery equipment, 1 per cent; warehouse equipment, 5 per cent; and land and buildings, 17 per cent.

The 10 co-operative stores organized as membership corporations, borrowed 83 per cent of their capital on short term notes, which were secured by the demand notes of members as collateral or were endorsed by members or directors or by the manager. Certificates of indebtedness made up 6 per cent and mortgages 5 per cent of their average total liabilities and net worth.

The method used by the co-operative stock corporations and the privately operated stores stands out in sharp contrast to the method used by the membership corporations. The three co-operative stores organized under the co-operative stock corporations law obtained 75 per cent of their capital from members, mostly in the form of stock. The 10 stores operated by partnerships had 93 per cent of their capital furnished by the owners. The individual proprietors, who operated 23 stores, furnished 77 per cent of the capital used by them. The stockholders furnished 71 per cent of the capital used by the eight private business corporations.

Thirteen of the co-operatives and 30 of the private dealers owned the buildings used in the business. The average total investment of the co-operative stores owning buildings was \$31,993.76, while that for the privately operated stores owning buildings was \$41,830.60.

The average net sales of the 47 stores for which it was possible to make up operating statements were \$88,275.64. The cost of goods sold amounted to \$77,993.27 or 88.4 per cent of net sales, leaving a gross margin of \$10,282.37 or 11.6 per cent of net sales. Salaries and wages were nearly half of the expenses. They were 5 per cent of net sales. The average total expense was \$9,377.70 or 10.6 per cent of net sales. This left a net operating income of \$904.67 or 1 per cent which was increased to a net income of 1.1 per cent by other miscellaneous income.

The average net sales of the co-operative stores were \$89,798.06 and those of the net private dealers were \$87,629.77. The higher gross margin obtained by the privately operated stores is probably due to buying at somewhat lower prices and to obtaining higher average retail prices. Some of the co-operative stores did not follow the current wholesale quotations when they were rising but were forced by competition to lower their retail prices when wholesale prices declined, thus narrowing their margin.

TRI-STATE DEALERS MEET

Between 200 and 300 grain men were present on February 10 at the annual meeting of the Tri-State Country Grain Shippers Association, held in Minneapolis, Minn. Subjects under discussion included:

Financing the 1927 Northwest crop, with use of local banks suggested rather than commission houses.

The function of the chamber of commerce in relation to the country elevator, with E. S. Woodworth of Minneapolis, head of E. S. Woodworth & Co., as speaker.

Grain trade legislation and farm relief measures, with Charles Quinn of Toledo, Ohio, secretary of the National Grain Dealers Association, giving highlights gleaned in Washington.

Development of barge traffic on the Upper Mississippi, with W. W. Morse of Minneapolis as speaker.

Grain storage laws and scale inspection.

The following officers were elected for the ensuing year: F. E. Crandall, president; E. A. Betts, Mitchell, S. D., first vice-president; Arthur Speltz, second vice-president; S. O. Tollefson, Milton, N. D., third vice-president; and A. O. Olson and H. W. Speight, directors, replacing T. M. Comer and B. D. Bascomb.

MINNESOTA FARMER DEALERS

The West Hotel, Minneapolis, was the scene of the twentieth annual convention of the Farmers Elevator Association of Minnesota on February 15, 16 and 17. Among the speakers were Weighmaster P. P. Quist; F. B. Townsend, director of traffic for the Minneapolis Traffic Association; A. H. Stolte of Blue Earth on the installation, cost and operation of feed mills. Albert Immer of Jeffers on "The Theory and Workings of Co-operation."

The proposed St. Lawrence waterway and its relation to grain marketing were discussed by A. C. Wiprud, secretary of the Upper Mississippi River Barge Line Company. The series of meetings was brought to a climax Thursday evening at the Association's annual dinner, held in the Nicollet Hotel.

The officers were re-elected, so that the executive personnel for the coming year is as follows:

President, J. F. Gustafson who has died; v.-president, H. J. Farmer, Pipestone; treasurer, Adam Brinn, Stewartville; members of board: Theodore Frederickson, Kirkhoven; Fred Seedenstricker, Wheaton; A. F. Nelson, Benson. At the meeting of the Board of Directors, A. F. Nelson was re-employed as secretary for the ensuing year.

HAY DEALERS PLAN MEETING

Announcement has just been made by Fred K. Sale, secretary-treasurer, the National Hay Association, that the thirty-fourth annual convention will be held at St. Louis, July 25, 26 and 27. The time and place of the annual meeting was decided upon by the Board of Directors at their recent mid-winter meeting in Cleveland, Ohio, from some 30 invitations received from as many cities and from the convention and tourist bureaus as well as the Chambers of Commerce.

The last time a meeting of the National Hay Association was held in St. Louis was in 1904 and those who were present at that meeting still remember that St. Louis put on a splendid meeting and a very good program of entertainment for the association members. The plans for this year's meeting have already been started which will be of

a very interesting nature and something which will be long talked of after the meeting comes to a close.

The dates of the meeting this year are a little different from usual and the days of the convention will be Monday, Tuesday and Wednesday rather than Tuesday, Wednesday and Thursday, as has been observed for the past several years. This will permit the saving of one business day for the hay and grain men who attend which heretofore has been really lost in traveling to the meeting place. St. Louis is located on splendid paved highways in all directions and it is expected that this meeting will be one of the largest attended in recent years. An invitation is extended by Secretary Sale to all those interested in the hay business in any respect to attend this meeting at St. Louis.

St. Louis combines the advantages of a central location, well suited for a national convention of this sort, and the natural benefits accruing from the fact that it is a well known hay market. Not only are some of the best known hay merchants there, but they have been active in the national affairs of the business. Since every effort is being made by the local interests to put the convention across in a big way, there can be no doubt that something in the way of a progressive program will be arranged.

3. If car is not weighed on track scales, the following estimated weights will apply:

Cars 36 feet, 6 inches or less in length...27,000 lbs.
Over 36 feet, 6 inches in length...30,000 lbs.

4. Corrections in freight charges will not be accepted by carriers, nor will claims be participated in which may be based upon weights determined except as outlined above and under the following conditions:

(a) Each individual shipper enters into a weight agreement with each individual initial carrier, agreeing to submit monthly a certified statement of all cars shipped from stations on each individual initial carrier, to show as to each shipment:

Point of origin.

Date.

Car number and initials.

Name of consignee.

Destination.

Weight at which shipment was billed.

Weight at which charges were collected.

Weight upon which final settlement was made between shipper and consignee.

Overcharge or undercharge (as the case may be) based on difference between weight at which charges were collected and weight upon which settlement was made between shipper and consignee.

(b) The final weights as settled between consignees and the shippers will be accepted as the basis for freight charges (subject to established tariff minimum weights) and claims for overcharge will be recognized and undercharges settled on basis of such weights. Claims must be presented to initial carriers.

(c) The monthly statement must be presented as promptly as possible after the completion of each month's business and the settlement of the same as between shippers and consignee, and in no case later than four months after the expiration of the month covered by the statement. Overcharge claims or undercharge corrections will not be considered after the expiration of four months from the last day of the month during which a shipment is made.

5. Open and free inspection of shippers' and consignees' records by representatives of, or inspection designated by, the carriers must be permitted for the purpose of verifying the correctness of monthly statements or certificates provided for herein.

The carriers recommend that the above rules be tried in the Central Freight Association and the Southern Freight Association territory for one season's business, subject to further consideration after the proposed trial.

TRANSPORTATION

RECOMMENDS LOWER CHICAGO RATES FROM IOWA POINTS

After receiving evidence submitted by the Chicago Board of Trade in its complaint against the Atchison, Topeka, and Santa Fe rail rates, Attorney-Examiner John McChord has recommended that the Interstate Commerce Commission order a downward adjustment of Iowa-to-Chicago rates on grain and grain products.

The rate from southwestern Iowa to St. Louis, he believes, is "unduly preferential" to St. Louis, and "unduly prejudicial" to Chicago to the extent that it exceeds two cents less than the rate to Chicago. The report is more favorable to Chicago than the one issued some time ago on the same case by Division No. 2, of the Interstate Commerce Commission. Decision of the case is pending.

INCREASE DENIED

The proposal of the Northern Pacific Railroad to increase grain rates from western North Dakota to Chicago and St. Louis has been held unjustified by the Interstate Commerce Commission. The Northern Pacific has had in effect a through tariff on grain from points of origin to places south. Under this tariff, milling in transit was permitted and grain was billed to Chicago, St. Louis or points south, milled at Minneapolis, and continued on its way.

In its petition the railway asked to have through tariffs increased to the level of combination rates between points of origin and destination. The commission indicated that it would allow the Northern Pacific to increase rates on flaxseed originating at points between Mandan and Geneva, N. D., and that the increase proposed on grain and grain products from Beach, N. D., would be permitted if the railroad would file new schedules.

AMES CUTS WAY THROUGH RATE JUNGLE

The determination of the Missouri Pacific Railroad to meet the competition of lines carrying grain for export through Montreal, has produced one of the most intricate rate tangles in the whole field of American grain tariffs; to H. C. Ames, examiner for the Interstate Commerce Commission, was delegated the labor of bringing some small degree of order at least, out of chaos created by the go-getting traffic heads in half a dozen railroad offices.

The result of his study has led him to recommend that the Commission require the railroad to amend their tariffs in connection with the proportional rate adjustments in effect at Kansas City, and St. Louis, Mo., Kansas City, Atchison, and Leavenworth, Kan., on wheat and its products originating in southern Kansas and Colorado, for ultimate shipment to Gulf ports.

The Missouri Pacific proposed to hold export grain to its lines by a five-cent per 100 pound reduction of charges beyond transit points, on traffic passing out of the country via the Gulf ports. Other carriers decided to meet the competition set up by the action of the Missouri Pacific which had resulted in grain seeking "Mo-Pac" rails and deserting those of its neighbors.

This carrier competition resulted in the grant of transit at Missouri River cities, and the giving of long, out-of-line, and backhaul service without extra charge. As the situation developed, the competi-

tion was not confined to export grain but extended to domestic traffic destined to interior points in Texas, Louisiana, and Arkansas.

REHEARING GRANTED ON SIX-CENT REDUCTION CASE

In view of the fact that the decision of the Interstate Commerce Commission to refuse the Minneapolis & St. Louis Railroad and the Soo Line permission to establish their proposed six-cent reduction on east-bound grain traffic, was a decision made possible only by a five to four vote, a rehearing of the case has been asked for by the railroads and granted.

Chicago, Kansas City, Duluth, Seattle and Buffalo grain men, as well as grain traders in several other centers look upon the decision as a distinct victory. The railroads proposed the reduction to recover traffic moving over lake and rail routes through Duluth and Buffalo, N. Y., and in response to requests of grain, industrial, and commercial interests of Minneapolis, together with northwestern millers, that the carriers build up Minneapolis as a grain and milling center by an outbound rate adjustment that would draw some of the grain away from Duluth and the lake-rail routes and bring it through Minneapolis over all rail routes. In the rehearing, the two railroads proposing the cut plan to give special emphasis to the fact that the reduction is in line with the Hoch-Smith inquiry principles.

LOOK FOR DECISION IN JUNE

The New Orleans, La., port executive committee, which was created last summer to contest the grain rate schedule which is declared to handicap this port and to favor Texas ports, has little hope of a decision in the rate case before June 1, it has been announced. The Interstate Commerce Commission's ruling prescribes a specially low domestic grain rate for Texas and Oklahoma points, and members of the committee assert that the grain schedule will continue to block grain shipments through this port, even with a favorable decision. The Winter wheat acreage in the Southwest is materially greater than it was last year, according to reports of the Department of Agriculture, and with favorable crop conditions the movement from the Galveston and Houston areas in 1927 will be larger than they were last year.

HAY ASSOCIATION CRITICISES PROPOSED RAILROAD RULES

The new rules on weights for hay and straw proposed by carriers for the consideration of the members of the National Hay Association, Inc., are printed below. Commenting on the proposed changes, Fred K. Sale, secretary-treasurer of the association, and J. C. Suttie, traffic manager, suggest that Rules 1, 2 and 4 be modified, and that Rule No. 3 be cancelled altogether.

1. Freight charges on shipments of hay or straw, in carloads, will (except as provided below) be computed on basis of weight certified to originating carrier by shippers at the time of shipment, and obtained at the time of loading, subject to minimum carload weight as provided by tariff governing.

2. In the event the shipper refuses to furnish certificate of weight for any shipment, such shipment will be weighed on track scales at point of origin, or en route, and such scale weight used, subject to minimum weight as provided by tariff governing.

GRAIN NOTES FROM ABROAD

The condition of the fall sown crop in most European countries was favorable, according to latest reports received. The total for all countries reporting to date, exclusive of Russia, remains at 2.6 per cent above last year. Including the Ukraine, it is 4 per cent above last year.

* * *

Russian wheat production for 1926 is estimated at 809,650,000 bushels, according to a report of the Russian Information Bureau in Washington. This report is 14 per cent greater than the revised estimate for 1925.

* * *

The condition of the wheat crop in Punjab, India, is reported average throughout the irrigated districts and below average in the unirrigated districts, according to a cable from the International Institute of Agriculture at Rome. A year ago the condition of the wheat crop was reported average to good. Punjab is the largest wheat producing province in India. The acreage sown to wheat this year in Punjab is 10,407,000 acres and 30,472,000 acres in all India.

* * *

United States exports of wheat, including flour, to February 12, have amounted to 163,500,000 bushels as compared with 68,200,000 bushels last year, and 200,600,000 in 1925. After deducting the imports from Canada since July 1, the net exports this season have been nearly 153,000,000 bushels. There has been more than three times as much wheat exported this year as last, and nearly 9,000,000 barrels of flour as compared with a little more than 6,000,000 last year.

* * *

Russian exports of wheat through the Bosphorus from August 1 to February 11 amounted to nearly 25,400,000 bushels as compared with upwards of 14,500,000 bushels last year. These exportations have remained regular all through the season.

* * *

Europe continues to import large quantities of wheat, as reflected by receipts at Netherlands ports and reported by the office of the American commercial attaché at The Hague. However, notwithstanding the heavy arrivals, stocks in Europe remain small. Indications are that the German wheat and rye crops are smaller than was anticipated. Germany is reported as buying large quantities of wheat and rye, which would indicate that the estimates of available stocks as published by the German Government were too high. Some effort is being made in Germany to have the import duty on grain and its products raised again.

* * *

In Portugal the Government closely controls and licenses the importation and sale of foreign wheat. Bids for the furnishing of from ten to fifteen thousand tons of wheat are generally called for monthly.

FIELD SEEDS

SOUTHERN SEEDSMEN SUCCEED

An important grain shipping center such as Nashville, Tenn., need not always be an important seed city. Freight rates can make or break a city's grain trade, but its seed trade stands or falls on the service which its seedsmen are prepared to render. The service in turn is dependent on the experience of the seed houses' managements, and the mechanical equipment under their direction rather than railroad tariffs. At the southern edge of the city of Nashville, stands the plant of the McKay-Reece Company, one of the best equipped plants of its kind in the country.

The firm goes back to 1894 when it was formed as a partnership under the name of McKay-Reece & Co., to do a field seed and seed grain business. This firm operated on Second Avenue, North, and during the year 1916 was incorporated as the McKay-Reece Company and remained on the same street.

Business grew steadily for this company which was continuing its original policy of giving the best kind of service to its customers. On Second Avenue it had no railroad facilities and was located in the retail section of the city. So finally the owners decided that they needed a plant more desirable for their business, with proper trackage. They lo-

was amended in the Senate so that the total was brought up to \$8,600,000 of which not more than \$2,500,000 was to be used for loans, advances, or sales for fertilizer in drought stricken areas in Georgia, South Carolina, Alabama, and not more than \$600,000 for fertilizer and nursery and cane stock in the storm stricken area of Florida and Louisiana.

The bill as signed by the President authorized the expenditures but the appropriation was not made.

Hope that the appropriation would be made died when Congress adjourned without passing the deficiency bill. Some are still hopeful that a way will be found to raise the money.

SEED CONGRESS IN 1928

The International Seed Testing Association has postponed its general assembly from May 1927 to 1928 when it will be held jointly with the Congress at the International Institute of Agriculture at Rome from the sixteenth to the nineteenth of May in that year.

The scientific and technical part of the congress is to be organized by a committee appointed by the Institute. This consists of K. Dorph-Petersen, president of the Association, Dr. J. C. Van Rijn, (the

Imports during February were not heavy. They were larger than in February, 1926, for Alfalfa, White Sweet Clover, Canada Bluegrass, Bent and chewing fescue but smaller for Red Clover, Alsike, Yellow Sweet Clover, White Clover, rape, ryegrass, "other fescues" and vetches.

THE 1926 SEED CROP

The 1926 crop shipments were indicated to be 3 per cent smaller for Red Clover seed and 8 per cent smaller for Alfalfa, but 6 per cent greater for Alsike Clover, 12 per cent greater for Sweet Clover, and 4 per cent greater for Timothy seed than last year, according to the United States Department of Agriculture. Movement from shippers' hands was at a faster rate than last year for these seeds but particularly for Alsike and Sweet Clover, whose movements were the most rapid in five or more years. Stocks held by shippers were larger than last year for Red Clover, Sweet Clover and Timothy but smaller for Alsike Clover and Alfalfa. Prices paid to growers for Red, Alsike, and Sweet Clover were higher than last year, but for Alfalfa and Timothy they were lower.

Schedules were sent to approximately 7,500 country shippers and from the returns the report



PLANT OF THE McKAY-REECE COMPANY, NASHVILLE, TENN.



INTERIOR VIEW OF THE McKAY-REECE WAREHOUSE

cated a lot on the railroad terminals and during the year 1924 built the present plant, shown in the accompanying illustration. This property consists of two floors, with approximately 75,000 square feet of floor space, together with a 30,000-bushel capacity elevator. The building faces on one of the principal streets of the city (Chestnut Street), with railroad trackage to both floors.

The building is of concrete and brick construction, well ventilated and equipped with a modern sprinkler system. To avoid artificial light, there is a monitor, 30x80 feet, which runs through the middle of the house. A freight elevator connects the floors. The office runs the entire length of the first floor on the east side and is well lighted.

The McKay-Reece Company does not confine all its activities to the seed business but in addition operates a bonded storage warehouse which is also shown in the illustration.

The officers of this company are: Duncan McKay, president; John E. Potter, vice-president; and D. M. Fort, secretary and treasurer.

IT PASSED—BUT IT DOESN'T MEAN ANYTHING

The Norbeck-Johnson Bill, which made provisions to loan money for seed to wheat growing farmers, for fertilizers, etc., to cotton growers and cane raisers, was passed by both Senate and House and signed by President Coolidge. But its backers failed in their attempt to have it include an appropriation of \$8,600,000 with which to carry out the provisions of the bill.

The bill was originally introduced for the purpose of enabling the Government to loan not less than \$5,000,000 to the wheat growing farmers for the purchase of seed wheat in South Dakota, North Dakota and Montana.

It passed the Senate and later the House. It

Dutch representative of the Institute), as vice-president, Dr. W. J. Franck (vice-president of the association), and M. T. Munn (the representative of the United States Association to the association executive committee) and one or two technical experts from Italy.

The reports of committees now at work, together with technical reports to be presented and the international testing rules and certificates indicate that this will be one of the most successful and important congresses to be held.

SEED BUSINESS FAIR

Seed demand for the week ended February 26 was fair, according to information obtained by the United States Department of Agriculture from leading seed markets. Prices of domestic Red Clover made marked advances in prices in all markets, but the majority of seeds were either unchanged or quoted about the same as the week before. Declines in prices were not sharp but outnumbered the advances.

Reviewing the situation for the month of February, the demand was especially good for domestic Red Clover, Alsike, Sweet Clover and a few kinds of seed but fair to poor for others. An average advance in price of \$3.55 per 100 pounds for domestic Red Clover and 75 cents for Alsike was made but a decline of 35 cents resulted for Sweet Clover. Important declines were \$2.05 for imported Red Clover, \$1.15 for Canada Bluegrass, 90 cents for lespedeza, 70 cents for White Clover, 50 cents for Bermuda grass, and 30 cents for Alfalfa. Other kinds to decline were: Bent grass, sheep's fescue, seed corn, seed oats, barley and buckwheat. Advances were made in the prices of: Crimson Clover, Redtops, orchard grass, perennial ryegrass, chewing fescue, meadow fescue, Siberian millet, Japanese millet, orange sorga ("cane"), and hairy vetch.

concerning the stocks, shipments, and prices was made. Questions in the schedules specified that figures covering shipments for each of the 1925 and 1926 crops were wanted rather than total shipments made during those years. Nevertheless, some shippers probably included a small proportion of 1925-crop seed, carried over by them or by growers, in their 1926-crop figures. This was, however, probably offset in part or entirely by the inclusion of 1924-crop seed with 1925 figures. Duplication of figures has been practically eliminated in the report. Reports from inquiries addressed to comparatively few seedsmen and to country dealers who reported they did not buy all their seed from growers were used for guidance only. Furthermore, many reports from shippers could not be used because they were incomplete.

The results of this survey do not necessarily indicate the relative production of each of the kinds of seed for the two years, but do indicate rather accurately the relative size of the shipments, prices paid to growers, and stocks held by those who reported for the two years.

IDENTIFY THE GOOD AND BAD

It is a comparatively easy matter to identify sound from unsound seed corn by the color of the germs, says the seed analyst, State Experiment Station at Geneva, N. Y. Unsound corn, or corn which has been injured by freezing, will have amber colored germs, while sound corn will have only white germs. This difference in germ color may be used as a guide in selecting ears of corn in the bin or crib for seed purposes, says this authority, but should not in any case take the place of a germination test.

"It is a waste of time and labor to test for germination ears of corn which may be unsound or in-

(Continued on Page 575)



EASTERN

The Nelson Grain & Seed Company has been incorporated at Wilmington, Del., capitalized at \$100,000.

The Ahern Bros., Inc., of South Windsor, Conn., has been incorporated to deal in grain, feed and flour. The capital stock is \$100,000.

Capitalized at \$50,000, the Lawson Coal & Grain Company, Inc., has been incorporated at Brockton, Mass. Carl Range is president, Roy W. Lawson, vice-president and Charles W. O. Larson, treasurer.

To deal in grains, feeds, hay and breadstuffs, the New England Acme Service Stores, Inc., has been incorporated at Springfield, Mass. Doris C. Kaubeck, Dorothy A. Hogan and Carl P. Nielson are interested.

To deal in grain, flour, feed, coal, wood, lumber, etc., the Wm. M. Bronk Coal & Lumber Company, Inc., has been incorporated at Fort Edward, N. Y. The incorporator is named as William M. Bronk of Hudson Falls.

The contract for the two movable marine towers which are to be built to the elevator of the International Milling Company of Minneapolis at Buffalo, N. Y., has been let to the Monarch Engineering Company of Buffalo.

An addition is to be built to the storage capacity of the Maritime Milling Company of Buffalo, N. Y., of 150,000 bushels. A boiler house, 60,000-gallon molasses storage tank to supplement a new molasses plant of 30 tons per hour capacity and fire-proof warehouse for sacked feeds are included.

SOUTHERN AND SOUTHWESTERN

A notice of dissolution of the Farmers Co-operative Elevator Company at Erick, Okla., has been filed.

The Dacoma, Okla., elevator of the Enid Milling Company, has been sold to the Farmers Elevator & Mill Company.

The capital stock of the Farmers Grain Company of Fort Worth, Texas, has been increased from \$5,000 to \$10,000.

John Lane is manager of the Munday Mill & Elevator Company of Munday, Texas, replacing U. R. House who retired.

Forest E. Grim has bought the Hanna-Geist Elevator at Aline, Okla. Mr. Grim was formerly with the Cox Grain Company.

The elevator at Goodwin (New Braunfels p. o.), Texas, of the Alva Roller Mills has been bought by the J. T. Patton Grain Company.

Cliff Cunningham has severed his connection with the Mena Grain Company of Mammoth Spring, Ark., and is succeeded by W. M. Hansard.

A grain elevator and warehouse, to be conducted on a co-operative basis, are to be built at Carmen, Okla. It is sponsored by the Farmers Union.

J. A. Simmons will engage in business as the J. A. Simmons Company at Fort Worth, Texas. He was formerly associated with the Smith Bros. Grain Company there.

Capitalized at \$7,500, the Farmers Grain & Elevator Company, Inc., of Crosbyton, Okla., has been incorporated. W. H. Hames, J. L. Marsh and Wm. Bertram are interested.

Capitalized at \$20,000, the Roxana Grain Company has been incorporated at Roxana, Ky. C. H. McKay, Leslie E. Smith, J. S. Evans and S. F. Peterson are interested.

The elevator of the Farmers Grain & Elevator Company at Turpin, Okla., east of the depot has been sold and the company has moved its office to the elevator west of the depot.

The application of the Creek Grain & Milling Company of Okmulgee, Okla., to sell \$60,000 of the capital stock of the company has been denied by the Oklahoma State Issues Commission.

Six concrete tanks which will give additional 100,000 bushels' capacity are to be built by the Hacker Flour Mills Company of Jefferson, Okla. They will be ready to take care of the new wheat crop.

The Enid Terminal Elevator Company of Enid, Okla., is to add to its storage capacity to the extent of 500,000 bushels. This will bring its total capacity to more than 1,000,000 bushels, making it the largest terminal elevator in Oklahoma. It

will be finished by June 1. The Jones-Hettelsater Construction Company, which erected the original unit a year ago, is building the addition.

A flour blending plant has been added to the elevator of the J. T. Gibbons Company, grain and flour dealers of New Orleans, La. At present this is the only blending plant at New Orleans.

The contract has been let by the El Reno Mill & Elevator Company of El Reno, Okla., and on March 1, ground was broken for the 268,000-bushel addition to the grain elevator at El Reno. The Jones-Hettelsater Construction Company of Kansas City has the contract.

MINNESOTA AND WISCONSIN

The E. A. Kande Grain Elevator at Horicon, Wis., has been bought by Fred Riege.

The Farmers Elevator Company at Fairmont, Minn., has been bought by the Musser Bros. George Musser is manager.

The Farmers Elevator Company at Steen, Minn., has been bought by W. J. Funk who will conduct it as the Steen Grain Company.

A grain elevator is to be built this spring at Rice Lake, Wis., by A. A. Bergeron. It will consist of eight bins with a capacity of 12,000 bushels.

New equipment has been installed in the plant of the Kenyon Farmers Mercantile & Elevator Company of Kenyon, Minn. H. E. Lee is manager.

The Dahl Elevator Company has been incorporated at Minnetota, Minn., by Ethel L. L. V., and A. M. Dahl. The company is capitalized at \$30,000.

C. A. Blomquist of Hanska has been elected manager of the La Salle Farmers Grain Company of La Salle, Minn. He was formerly agent for the Eagle Roller Mill Company of New Ulm, at its elevator at Hanska.

The elevator of the New Richmond Roller Mills Company of New Richmond, Wis., at Cylon, has been torn down and the material moved to New Richmond where it will be used in the construction of a warehouse for dairy and chicken feeds.

The Kent (Minn.) Farmers Elevator has been bought from the Moorhead Farmers Elevator Company of Moorhead, Minn., by Edward Colliton who has been with the latter company for 12 years. The Kent elevator was bought by the Moorhead firm two years ago.

A modern grain elevator was put into operation on February 1 at Moorhead, Minn., for the Moorhead Farmers Elevator Company. It replaces the old elevator which burned and has capacity of 40,000 bushels. The elevator has a grain handling capacity of 9,000 bushels grain per hour.

INDIANA

The Hutchinson & Son Elevator at Arlington, Ind., has been improved and repaired.

G. F. Keever and V. Pierce have bought the Moreland Co-operative Elevator at Moreland, Ind.

New coal bins have been added to the equipment of the Morristown Elevator Company of Morristown, Ind.

H. E. Spice is succeeded as manager of the Home Grain Company of South Milford, Ind., by P. T. Newby.

The Aylesworth, Ind., elevator owned by Freeman Knowles which burned on January 8 is to be rebuilt. It will be of modern construction.

A half interest of D. S. Swisher in the Witt Elevator at Witt (Kitchel p. o.), Ind., has been bought by Mr. Cermes. A. N. Hudson still retains his share.

The Williamsburg Co-operative Association's elevator at Williamsburg, Ind., has been put under the management of Will Shoemaker, formerly of Carlos.

The name of the Sandborn Elevator Company of Sandborn, Ind., has been changed to the White River Grain Company. The elevator has a capacity of six cars.

The Farmers Co-operative Company has sold one of its elevators at Wolcott (Viedersburg P. O.), Ind., to the Wolcott Grain Company of Seaford. J. R. Nelson is manager. The building is being moved to Seaford.

A new elevator is to be built at Clymers, near Logansport, Ind., on the site of the Henry Hurst

Elevator which burned on February 16. The building was the second elevator to burn on that site within three years. The loss was \$40,000 including 10,000 bushels oats, quantity of corn, wheat and Clover seeds.

IOWA

Steel tanks have been completed at West Davenport, Iowa, by the Victoria Elevator.

The Farmers Elevator Company of Olaf (Belmond p. o.), Iowa, has installed a new motor.

L. J. Fevold succeeds Jim Cowan as manager of the Farmers Elevator at Badger, Iowa.

The Farmers Elevator Company of Grinnell, Iowa, has been dissolved and a new firm organized.

W. T. Thorp is now manager of the new Farmers Co-operative Elevator Company at Baxter, Iowa.

A self compensating auto weighing out scale has been installed by George Schissel of Varina, Iowa.

The Uppdike Elevator Company has leased the elevator at Gray, Iowa, to the Trans-Mississippi Grain Company.

A coal loader has been installed by the Farmers Elevator Company of Scranton, Iowa, to facilitate the handling of coal.

A new Fairbanks Scales has been installed by the Farmers Grain Company of Latimer, Iowa. H. M. Jensen is manager.

J. E. Langerud has been elected secretary of the Leland Co-operative Elevator Company of Leland, Iowa, succeeding the late O. G. Thune.

A number of improvements have been made to the plant of the Trans-Mississippi Grain Company of Smithland, Iowa. E. E. Greene is manager.

The Independent Elevator Company of Clutier, Iowa, is under the management of F. J. Wellik who succeeds John Peters. Mr. Wellik was formerly at Vining.

Dow, Hale & Lerigo have put in an addition to its elevator at Royal, Iowa, and installed a 60-horsepower Fairbanks-Morse Engine with a 27-inch feed mill and other equipment.

WESTERN

A plant has been established at Elida, N. M., for the A. G. Troutt Grain Company.

The Eastern Montana Elevator Company of Fallon, Mont., has closed its elevator.

W. F. Hines will let the contract soon for the erection of a grain elevator at Gilcrest, Colo., which burned.

The elevator of the Eastern Montana Elevator Company at Glendive, Mont., is to be remodeled this spring.

The capital stock of the Peerless Milling Company, grain and feed dealers at Stockton, Calif., has been increased to \$100,000.

Capitalized at \$100,000, the Barlow & Dean Company has been incorporated at San Gabriel, Calif., to conduct a grain and hay business.

George L. Messick and George W. Kirkpatrick have bought the property of the bankrupt Colusa Milling & Grain Company, Colusa, Calif.

N. F. Holland will conduct the Farmers Grain & Supply Company of Clayton, N. M., which has been opened as a partnership consisting of N. F. Holland, George Bauer and Roy A. Martin.

A warehouse has been opened at Winslow, Bainbridge Island, Wash., by Galbraith & Co., of Seattle, where grain and feed will be sold. The company specializes in poultry feeds.

The M. E. Gailey Elevator at Platner, Colo., has been sold to the Mensendieck Grain Company of Kansas City which concern will make extensive improvements to the property.

The Washington Co-operative Egg & Poultry Association will take over the Milwaukee Dock No. 3 with its grain elevator at Tacoma, Wash. The property is taken over for a term of 10 years on a lease.

A new crib elevator is to be built at Marcellus, Wash., for the Marcellus Farmers Elevator Company. The company already has a large elevator there but this new one will contain 10 bins and hold 35,000 bushels wheat.

Farmers Grain Elevator Company of Athena, Ore., has the contract for the erection of additional

storage facilities at the plant there. Specifications call for construction of four bins with total capacity of 60,000 bushels. Work will be begun on May 1. It will be of cribbing on a concrete foundation.

The Farmers Elevator & Supply Company of which J. C. McKean is secretary-treasurer is to rebuild its elevator at Moro, Ore. This will be a 35,000-bushel elevator. The company will also build a warehouse for feed, flour and barley.

The J. D. Infield Grain Company has started to build a 20,000-bushel elevator at Springfield, Colo. The plant will be equipped with grinder of large capacity and will be under the management of H. H. Heckethorn who will commence operations about March 15.

The contract has been let by the Farmers Co-operative Elevator Company of Haxtun, Colo., for a 20,000-bushel cribbed elevator. It will have two stands of elevators with worm gear drives and enclosed Fairbanks Motors. Two signaling distributors will be used and a 10-bushel automatic scale will weigh the grain to the cars. A dust collector and truck and wagon dump will also be installed. The plant will have heavy concrete foundation and concrete hoppers and will be iron-clad.

W. H. McDonald of Spokane, Wash., for six years in the grain business in Spokane and Seattle, recently completed a deal for the purchase of five large grain warehouses operated by the Palmerton-Moore Grain Company at Rosalia, Spangle, and Northpine and Donahue Sidings on the P. & L. branch of the Northern Pacific Railroad. The purchase price was not named and names of his associates will not be made public for the time being. The company has offices in the Peyton Building, Spokane.

OHIO AND MICHIGAN

Electric power is being installed in the elevator of Andrew Ringlein at Havana, Ohio.

The Oakley Farm Bureau Association will rebuild the grain and bean elevator at Oakley, Mich., which burned.

The grain elevator at Plain City, Ohio, owned by B. E. Thomas, has been sold to B. F. Youman of Pataskala.

A new 20,000-bushel elevator has been finished at West Jefferson, Ohio, for the West Jefferson Elevator Company.

The capital stock of the Clare Grain & Bean Company of Clare, Mich., has been reduced from \$40,000 to \$25,000.

Numerous improvements are planned for the Prairie Farmers Co-operative Company at Hatton, (Rising Sun p. o.), Ohio, including new conveyors, transmission and other equipment.

Walter G. Elliott, a grain and feed merchant, has sold a part interest in the elevator at Glenmont, Ohio, to Cletus Starner. Mr. Elliott also operates elevators at Millersburg, Holmesville, Mt. Hope and Berlin.

The elevator of the Ada Farmers Exchange at Ada, Ohio, which burned a few months ago is to be rebuilt at a cost of \$15,000. The Grain Exchange was incorporated in 1920 and has a working capital of \$30,000.

The elevator at Lippincott (Urbana P. O.), Ohio, operated for a number of years by the Lippincott Farmers Exchange has been sold to Armstrong & Johnson of Osborn. The new owners contemplate improvements on the property.

Mr. Murdoch has resigned his position as manager of the Tontogany Farmers Elevator Company of Tontogany, Ohio, and is now traveling for the Weber Milling Company. The Tontogany Elevator is undergoing extensive repairs and alterations.

THE DAKOTAS

The J. T. Scroggs Elevator at Marion, S. D., has been closed.

The Powers Elevator at Lallie, N. D., has been bought by Wm. Pfau.

A metal grain cleaner has been installed by the Farmers Elevator Company of Ferny, S. D.

O. Jerde succeeds C. L. Emerson as manager of the Farmers Elevator Company located at Toronto, S. D.

A. L. Anderson has resigned as manager of the Farmers Elevator Company operating at Maida, N. D.

Extensive improvements have been made by the Tri-State Milling Company at Sturgis, S. D., and further plans include the erection of a warehouse of fireproof construction. The company just finished a 30,000-bushel elevator.

A 35,000-bushel, cribbed, ironclad elevator is to be built at Mason (Erie P. O.), N. D., replacing the one which burned. It will be operated by the Mason Elevator Company.

Articles of incorporation have been filed by the Farmers Co-operative Elevator Company at Car-

bury, N. D., capitalized at \$25,000. C. Moun, H. V. Gorder, O. Crogen, A. Kornkven, G. A. Berge, N. Magnuson and others are interested.

The elevator of the Farmers Co-operative Association at De Smet, S. D., has been bought by S. Arneson, formerly manager.

Capitalized at \$5,000, the Light Grain Company, Inc., has been incorporated at Pierpont, S. D. The incorporators are Elma Light and Charles E. Paulson.

The Farmers Co-operative Elevator Company of Clear Lake, S. D., is to be operated under the management of W. C. Parish, who succeeds Adolph Iverson.

The elevators of the Equity Elevator Company and the Acme Elevator Company at Tower City, N. D., has been bought by R. J. Cooper. A 24-inch attrition mill has been installed.

A machine for cleaning and separating grain has been bought by C. S. McGlen, grain buyer, of Minnewaukan, N. D. With this 2,500 bushels of grain can be handled in eight hours.

MISSOURI, KANSAS AND NEBRASKA

G. G. Railsback has leased the Farmers Elevator at Langdon, Kan.

Gifford Kivett is now manager of the Farmers Union elevator at Page, Neb.

Business has been discontinued at Hutchinson, Kan., by the Logan Bros. Grain Company.

The Updike Elevator at Rising City, Neb., has been leased by L. E. Krajicek of David City.

C. W. Gividen has resigned as manager of the Farmers Co-operative Elevator at Jasper, Mo.

Repairs are to be made to the elevator of the Wm. Trotter Company at Stuart, Neb., in June.

Repairs are being made to the elevator of the Farmers Elevator Company at Sutherland, Neb.

The Farmers Union Mercantile Elevator at Minatare, Neb., is now owned by L. P. Luper.

The Midwest Elevator at Centerview, Kan., has been bought by Tom Brown, formerly of Rolla, Kan.

R. B. Sickler has resigned as manager of the Star Grain & Lumber Company of Waverly, Kan.

George Reece is manager of the Farmers Union Elevator at Bedford, Mo., succeeding William Wells.

L. H. Kackley of Ness City succeeds Fred Howard as manager of the Farmers Elevator at Ness City, Kan.

W. J. McPike has given up his position as manager of the La Grange Elevator Company at La Grange, Mo.

J. E. Bailey has resigned as manager of the Farmers Co-operative Grain Company of Pleasant Dale, Neb.

J. R. Henry has succeeded A. R. Seaton as manager of the Cameron Co-operative Elevator at Cameron, Mo.

The Brock Grain Company has bought the plant of the Buffalo Grain Company at Buffalo, Kan., and is operating it.

A six-bushel automatic scale and work gear head drive have been installed by the Western Wheat Company at Kimball, Neb.

The elevator of Felix Ernest at Straight Creek, Kan., which burned in 1915, is to be rebuilt if the crops next season warrant it.

L. A. Petterson is manager of the Hanover Farmers Union Elevator, Hanover, Kan. He succeeds Glen Terp in this position.

R. L. Begley is manager of the Farmers Co-operative Elevator at Canton, Mo. He was for seven years manager of the North River Elevator.

The interest of A. L. McClure in the McClure Grain Company of Ulysses, Kan., has been sold to the Davidson Grain Company of Hutchinson.

A 26,000-bushel modern grain elevator is to be built at Preston, Kan., for the Preston Co-operative Grain & Mercantile Company. The contract has been let.

Jerome Sharp has resigned his position with the Seth Jones Elevator at Creighton, Neb., which he has filled for eight years and is succeeded by E. R. Johnson.

A new elevator is to be built at Paxton, near Halstead, Kan., for the Midland Flour Milling Company of Kansas City. It will have a capacity of 25,000 bushels.

The Koehler-Twidale Elevator Company of Cowles, Neb., has changed hands. The property will now be known as the McCoy Grain Company, with A. R. McCoy, manager.

The Farmers Grain, Lumber & Coal Company of Cortland, Neb., is to go out of business. The elevator of the company was bought at public sale by J. A. O'Brien and George Malone for \$14,200.

The elevator at Florence, Kan., is being torn down and a new 15,000-bushel elevator is to be built on it. It will be ironclad, operating two legs, and will be equipped with modern improvements

including automatic scales. The elevator has been leased by the Kansas Flour Mills Corporation and has been under the management of Neil McCallum.

The Pillsbury Flour Mills Company has let the contract for the 1,500,000-bushel elevator to be built at Atchison, Kan., to the Folwell-Ahlskog Company of Chicago.

Pete Keist, formerly manager of the Pawnee County Co-operative Company of Earle, Kan., succeeds George Neuforth as manager of the Farmers Elevator at Heizer, Kan.

Other stockholders of the Farmers Union Elevator & Business Association at Sherdahl (Scandia p. o.), Kan., have been bought out by Ole Johnson, who is now sole owner.

The Clinton Grain Company of Clinton, Neb., of which James C. Motz is manager, is putting in a dump, automatic scale, two motors, and increasing its capacity 5,000 bushels.

B. B. Fellows has resigned as manager of the Farmers Co-operative Elevator Association of Weston, Mo., a position which he has held since the organization of that company.

A grain elevator of 75,000 bushels' capacity is to be built at Sublette, Kan., by a company backed by C. D. Jennings, C. W. Durnil and John Watson. The elevator will be finished June 15.

A 100,000-bushel elevator is to be built between Missler and Plains, Kan., by the owners of the Geo. E. Gano line of elevators. It will be of concrete and will be ready by the middle of June.

The Rhinehart Bros.' elevator addition at Dodge City, Kan., is now practically completed. It will provide room for new machinery which will make it possible for the firm to grind and mix feed.

Harold Keist is now associated with the Kansas Grain Company of Larned, Kan. He was formerly general manager of the Pawnee County Co-operative Company of Larned, Kan., where he is succeeded by G. I. Brown.

C. E. Reynolds has bought the Marceline, Mo., elevator under a deed of trust. A reorganization of the company will be effected at once and the business will be conducted under the management of George Ketchum.

W. C. Elder has sold his business at Albany, Mo., to the Fullerton Lumber Company. He was proprietor of the Elder Coal, Grain & Feed Store for 40 years. The lumber company is discontinuing the feed department.

The contract for the building of concrete bins with capacity of 750,000 bushels, which will double the storage capacity of the Kansas Milling Company at Wichita, Kan., has been let. The work is to be finished in June.

The Dees-Garner Grain Company has been incorporated at Bernie, Mo., capitalized at \$25,000 to buy, sell and deal in wholesale and retail grain, cotton and cotton products. John J. Garner, Flora B. Garner and Ross E. Dees are interested.

ILLINOIS

H. W. Street is manager of the Illipolis Farmers Grain Company of Illipolis, Ill.

The grain elevator of A. A. De Long at Osman, Ill., has been sold to Carey Kirk.

The Farmers Grain and Supply Company of Littleton, Ill., has decided to lease its elevator.

Bert Whitaker is manager of the Farmers Elevator Company of Granville, Ill., succeeding H. L. Dysart.

A truck dump has been installed by the Exline Farmers Elevator Company of Exline (Kankakee p. o.), Ill.

The elevator of the J. E. McCann Grain Company of Buffalo, Ill., has been overhauled. Lloyd W. Young is manager.

A new truck scale is to be installed this spring by the Galva Co-operative Grain and Supply Company of Galva, Ill.

Henry Lammers is replaced as manager of the Farmers Co-operative Grain Company at Lenzburg, Ill., by William Heap.

Root E. Laycock is succeeded as manager for the Farmers Co-operative Elevator Company at Ursa, Ill., by T. J. Feeney.

The grain, hay and live stock business formerly conducted at Hillsboro, Ill., by McDonald & Boyd, is now owned by James L. McDonald.

A Zinar has resigned as manager of the Farmers Co-operative Elevator Company of Wyand, Ill., and is in the Thiery grain office at Princeton.

The corn cribs of the Farmers Grain & Supply Company at Annawan, Ill., have been repaired and addition has been built to the coal sheds.

William Goden has sold his elevator business at Wilmington, Ill., to C. J. Luther. He retired from business because of poor health some time ago.

The Wisconsin Grain Elevators Company of Savanna, Ill., is making considerable improvements on its building. The grain tanks, each of 50,000-bushel capacity, are being reinforced. An auto-

matic sprinkler system is being installed and new floor sweeps put in. The spouts are being relined with sheet iron.

The McClure Bros. have bought the Dunn Elevator at Sullivan, Ill. It was owned by J. B. Martin and had not been used for the last few years. It was sold at auction.

A new electric motor has been installed at the Farmers Elevator Company of Herscher, Ill. There are two 16-horsepower motors now in use. Mr. Theusen is manager.

To deal in grain, hay, farm products and flour, the C. A. Vincent Company has been incorporated at Odell, Ill. Kate E. Vincent, E. F. Gordon and C. A. Vincent are interested.

O. E. McCormick is now associated with his brother, Charles C., in the elevator business at Altamont, Ill. They have bought the Shumaker elevator and are now operating it.

The grain elevator formerly owned by W. H. Norton & Co., at Elgin, Ill., has been bought by the Elgin Flour & Feed Company. Mr. Norton will continue the flour and feed business.

A modern grain elevator of 50,000 bushels' capacity is to be built at Edinburg, Ill., by O. H. Rink and Joe Scheib replacing their elevator which burned. It will cost in the neighborhood of \$35,000.

Extensive improvements are being made to the elevator of the Hume Elevator Company at Hume, Ill., of which Roy McMullen is manager. Part is to be remodeled and part torn down. Large coal sheds are being built.

Improvements are to be made to the 45,000-bushel elevator of the Carlock Farmers Elevator Company of Carlock, Ill., including the erection of a 25,000-bushel addition and coal sheds on the site of the dismantled elevator.

To engage in malting, milling and manufacturing, the Northwestern Malt & Grain Company has been incorporated at Chicago, Ill. The capital stock of the firm, which was incorporated by G. Willard Hales, G. M. Merchant and Walter W. Hiss, is \$20,000.

The Cornland Farmers Grain Company has been incorporated to operate at Mt. Pulaski, Ill., with

capital of 300 shares of no par value stock. The company deals in grain, farm products and flour. E. A. Downing, Nicholas L. Hubbard and G. H. Hubbard are interested.

An ironclad building has been built by the Stubblefield & Rogers Grain Company of McLean, Ill., and is equipped with a 26-inch attrition mill and feed mixer to be used in manufacturing various kinds of feed. The driveway is equipped with modern auto truck dump for the unloading of the grain.

CANADA

The Northern Grain Company of Winnipeg, Man., has secured a site at Port Arthur, Ont., for the erection of a modern 2,000,000-bushel elevator within a year.

The Vancouver Harbor Commissioners Elevator and the Alberta Wheat Pool Elevator No. 2 are said to have been leased by the James Stewart grain interests.

The bulk of the assets of the Saskatchewan Co-operative Elevator Company, Ltd., of Saskatchewan, has been sold to the Saskatchewan Pool Elevators, Ltd., and the affairs of the company have been terminated.

The Reliance Grain Company of Winnipeg, Man., is planning an addition to its present terminal which would provide additional storage of 1,000,000 bushels. Its present terminal elevator was completed last year.

An addition is being built to the elevator of the Strathroy Flour Mills, Strathroy, Ont., which will increase the grain storage capacity from 20,000 to 35,000 bushels. R. M. Pincombe & Sons are owners of the property.

A grain elevator is being planned for Owen Sound, Ont. The new house will have a capacity of 1,000,000 bushels and will be constructed alongside the present elevator with conveyor belts running from one to the other. The elevator will cost \$225,000 and the city is asked to grant fixed assessment of \$40,000 for 10 years, to waive the profit sharing clause in the old agreement and to deed over to the company half an acre of ground adjoining the present elevator.

vators at Woodhull, Rio, New Windsor and also at Crion, Ill.

KOENIG.—William Koenig died aged 82 years at Plainview, Minn. He in 1883 bought a grain elevator which he operated for a short time before its destruction by fire. His widow and seven children survive him.

LEWIS.—George C. Lewis, former owner and manager of the grain elevator at Markleville, Ind., died on February 20 at his home in Middletown, Ind. His widow, three sons and two daughters survive him.

MAC NEAL.—Walter F. MacNeal died from asphyxiation. He was head of the feed, grain and hay firm of Walter F. MacNeal & Co., Baltimore, Md. It is believed that he took his life when dependent over the prospect of losing his eyesight. He was formerly associated with J. M. Frisch & Co., on the Baltimore market and when Mr. Frisch died the name was changed to Walter E. MacNeal & Co.

MAY.—Clarence B. May died at Fargo, N. D., aged 81 years. He was active in the organization of the equity grain marketing movement. He was also a stockholder and active member of the Harwood and Argusville grain elevators. His son and daughter survive him.

MURRAY.—James E. Murray died from pneumonia on February 5 at hospital in Baltimore, Md. He was formerly of Murray & Bro., feed, grain and hay merchants and a member of the Chamber of Commerce.

NETT.—Frank Nett, a well known merchant of Peebles, Wis., and proprietor of Frank Nett & Co., dealers in feed, lumber, fuel, etc. His widow and 10 children survive.

PROBST.—Herman Probst died recently aged 67 years at Long Beach, Calif. He was for years in the grain business in Kansas and at one time was a member of the Kansas City Board of Trade. He had been located at Arkansas City, Kan., most of his life.

RITSCHER.—George Ritscher, a retired grain dealer, died at Taylorville, Ill., aged 68 years. He is survived by his widow, two sons and a daughter.

ROBINSON.—B. W. Robinson died at Laferia, Texas. He was formerly in the grain business at Enid, Okla.

SHAW.—George A. Shaw died recently aged 52 years. He was for the past year head of the Shaw's Mill & Feed Company, Ft. Worth, Texas. His widow, four sons and four daughters survive him.

SWANSON.—John C. Swanson died from injuries received when he fell down a shaft in the Green Bay & Western Elevator operated by the Cargill Elevator Company at Green Bay, Wis. He was superintendent of the elevator. He was 34 years old and is survived by his widow and two children.

THUNE.—Ole G. Thune died recently. He was secretary of the Farmers Elevator Company of Leland, Iowa. His widow, four sons and two daughters survive him.

VAN NESS.—R. M. Van Ness, grain elevator constructor and manufacturer of grain elevator equipment, died suddenly aged 50 years at Omaha, Neb.

VAUGHN.—George W. Vaughn died recently at Kankakee, Ill. He was president of the Farmers Grain Company. His widow and four children survive him.

OBITUARY

ANDERSON.—E. C. Anderson died on January 27 at Sterling, Colo. He was a grain dealer.

BARRY.—Lawrence A. Barry, for 37 years a member of the Chicago Board of Trade, died at Chicago, aged 67 years. He started at the Board of Trade as a messenger and later became a member of the commission firm of Barry & Scott.

BELZ.—Charles Belz, a member of Charles Belz & Sons, grain, lumber and coal dealers at Conrad, Iowa, died on February 19. Further details are given elsewhere.

BIGGS.—Lee A. Biggs died recently. He was vice-president of the Davis & Andrews Company, grain dealers and corn millers. He had been with the company since 1900.

CASEY.—Walter Casey died from injuries received in fall in the headhouse of the Yukon Mill & Elevator Company at Banner, Okla. He was son-in-law of John F. Kroutil, president of the company. He was leaning out of the window giving instructions to workmen below when he lost his footing.

CRAIB.—John L. Craib died at his home in Richmond Highlands, near Seattle, Wash. In 1894 he opened a wholesale produce, hay and grain business at Seattle, Wash. In 1918 he became manager of the Washington Co-operative Egg and Poultry Association, which position he held at the time of his death. His widow, two daughters and one son survive.

CREIGHTON.—James M. Creighton died in an accident at Los Angeles, Calif., on February 24. He was formerly a member of the Chicago Board of Trade.

DISHER.—J. F. Disher died at his home in Rockford, Ill. He had been in the grain business for years and retired about four years ago.

FLAHIVE.—John H. Flahive, head of the grain exporting firm of Flahive & Co., New York City, died on February 25, aged 49 years. He died in Havana, Cuba, where he had gone for his health, with his wife and two children. He was a member of the New York Produce Exchange.

GRANT.—Wilton D. Grant died aged 70 years on February 20. He had been a member of the Kansas City Board of Trade since 1892. His widow and two sons survive.

GUSTAFSON.—John F. Gustafson of Windom,

Minn., died suddenly while making an address at the meeting of the Farmers Elevator Association of Minnesota just after his re-election to the presidency. Heart trouble was the cause of his decease.

HERRICK.—Eli W. Herrick died on January 30 at Watertown, N. Y. He was a prominent feed merchant there.

HERZIG.—Harold Herzig was caught in the machinery of the elevator of the Robinson Milling Company at Sylvan Grove, Kan., of which he was manager, and was killed.

HOUGH.—Frank Hough died recently at Galesburg, Ill. He was a grain dealer, and owned ele-

FIRES—CASUALTIES

Saco, Mont.—Fire destroyed the Sherlock Grain Elevator recently.

Madison, S. D.—The Schultz Bros.' elevator was destroyed by fire.

Bloomington, Ill.—The Manchester Grain Elevator was destroyed with \$30,000 loss.

Turin, Alta.—Fire destroyed the elevator of the Ogilvie Milling Company on February 21.

Washington, Kan.—Fire of unknown origin severely damaged the plant of G. C. Dooley.

Hemple, Mo.—Fire destroyed the coal shed of the Easton Elevator Company on February 5.

San Leandro, Calif.—Fire destroyed, with \$3,000 loss, the fuel and grain warehouse of Fred Schmidt.

Williamsburg, Mich.—Fire of unknown origin destroyed the warehouse of C. L. Randall & Co., on February 14.

Rossville, Ill.—The North Elevator of the Rossville Grain Company was slightly damaged by fire on February 17 which resulted from spontaneous combustion in oats.

Elsberry (Rock Lake p. o.), N. D.—Fire on January 27 broke out in the engine room of the T. D.

Wildish Elevator. The engine room and its contents were burned, and will be rebuilt. The elevator itself was not damaged.

Rolfe, Iowa.—The property of the Rolfe Grain & Milling Company was destroyed by fire with a loss of \$40,000.

Philadelphia, Pa.—Eight floors of the frame grain elevator of L. F. Miller & Sons were destroyed by fire on March 7.

Prescott, Ark.—Fire damaged the plant of the Nichols & Gullick Company with a loss of \$2,000. There was no insurance.

Lake Odessa, Mich.—A hot box on scourer was the cause of a small loss in the plant of Walter A. Burling on February 3.

Tipton, Kan.—Fire of unknown origin damaged the office and engine house of the C. E. Robinson Elevator Company on February 3.

Celina, Ohio.—Fire which broke out in a Randolph Drier resulted in a small loss to the plant of the Palmer-Miller Grain Company on February 18.

Suffolk, Va.—Fire of unknown origin damaged the property of the Newsome Feed & Grain Com-

pany on February 16 with \$1,000 loss. An elevator was burned, a wooden conveyor and other slight damages done. The loss was covered by insurance.

Dwight, N. D.—Fire destroyed the seed plant of the R. F. M. Seed Company containing about 250,000 pounds of Sweet Clover on February 15.

Edinburg, Ill.—The elevator of Rink & Scheib was destroyed by fire on March 1. It contained 25,000 bushels of grain and the loss was \$60,000.

Hartford, Kan.—The elevator of J. W. O'Connor was slightly damaged by fire on February 8, which was due to the explosion of a starting torch in the engine room.

Milton Center, Ohio.—Fire damaged the drier in the elevator of the Royce & Coon Grain Company here. The damage amounted to 500 bushels contained in the drier.

Madison, Mo.—Fire on February 27 destroyed the grocery and feed stock and building of the Farmers Elevator & Exchange Company. The loss amounted to \$15,000.

Waco, Texas.—Fire damaged the plant of the

Clements Grain Company with a loss of \$8,000. The fire originated in the corn shelling department. The loss is covered by insurance.

St. Louis, Mo.—Fire destroyed the warehouse of the Schwartz Bros. Feed Company with loss of \$20,000. Approximately 800,000 pounds of hay were in the building and destroyed.

Cairo, Ill.—The Halliday Elevator here was damaged slightly by fire on February 17 with \$5,000 loss. The elevator contained many thousands of bushels of oats, wheat and rye.

Clymers (near Logansport), Ind.—Practically a total loss was sustained by the Hirsch Bros. Grain Company on February 6. The loss was \$40,000. Several thousand bushels of grain burned also.

Dawson, Minn.—The Farmers Elevator, filled with stored grain, was completely destroyed by fire. A box car loaded with corn was also lost in the flames. The origin of the fire is unknown.

Oakley, Mich.—The Oakley Farm Bureau Association sustained a total loss to its elevator on February 20, with a \$35,000 loss. The origin of the fire is unknown. The elevator was insured.

company which will succeed that J. F. Weinmann Milling Company. Mr. Raleigh is manager of the business.

The Arthur Simon Grocery & Feed Store at Junction, Texas, has been bought by L. A. Taylor. Arthur Simon becomes owner of the ranch formerly owned by L. A. Taylor.

The Security Feed Company of Chattanooga, Tenn., is now in its new building. The company handles a complete line of horse, mule, dairy, pig and poultry feed and salt.

The retail store of the Citrus Belt Milling Company at Pomona, Calif., has been bought by J. R. Sullivan, formerly of Hardin, Mont. He will operate as the Citrus Belt Feed Store.

The H. L. Powell Coal, Flour & Feed Company at Greenville, Ohio, has been bought by O. B. Karns & Sons. The retiring owner, H. L. Powell, is managing a country elevator near there.

A retail and wholesale establishment has been opened at Wichita, Kan., by the Grain Products Company handling a full line of stock and poultry feeds. J. T. McClelland and E. M. Monson are interested.

George A. Cooper, who is in the hay business and treasurer of the Crowninshield Mill, Inc., of Cato, N. Y., is now president of the First National Bank at Cato. He was vice-president of the bank for 16 years.

The feed stock of George J. Skinner at Utica, N. Y., has been bought by the Grange Store, Inc., of Utica, and a feed mill and power for grinding purposes have been leased. They will begin operation there within a short time.

A partnership has been started at Nashville, Mich., by John E. Lake and Ward Smith who will operate as the Quality Feed & Produce Company. The firm will operate a feed, seed and produce business at Ionia, Mich.

B. T. Smith has bought the interest of J. M. Ellis in the San Fernando Feed & Seed Store, San Fernando, Calif. Mr. Ellis bought the interest a short time ago from J. M. Beech. Mr. Smith will be assisted by his son, Clarence.

The Atlantic Feed & Supply Company has opened an office and store at Lake Worth, Fla. The business is owned by R. M. and Wm. E. Traub and handles a complete line of Purina feeds as well as seeds, cottonseed, hay and grain.

To do a strictly brokerage business in meals, concentrates, shells, and fertilizers, the Coast Products Company, Inc., has been incorporated at Portland, Ore., by George E. Frost, Harry W. Freeman and Frank E. Ford. They will handle the local business of W. J. Lakes & Co., which has its headquarters at Seattle.

HAY, STRAW AND FEED

A feed store has been opened at Kennett, Mo., by H. B. Kelley.

A feed store has been opened at Jefferson, Iowa, by J. F. Herman.

A retail feed store has been opened at Taylor, Wis., by E. Stiles.

A feed store has been opened at Johnson, Neb., by John H. Holtgrewe.

A warehouse for feed and seed is contemplated by J. K. Hill of Nevada, Mo.

The Hosack Feed Store at Chanute, Kan., has been bought by J. E. Farnum.

E. M. Ashley of Pierce City, Mo., is remodeling a building for a feed and seed store.

A wholesale and retail feed store has been opened at Louisa, Ky., by Blankenship & Ware.

D. C. Topping is manager for the Ishpeming Feed Company's store and warehouse at Ishpeming, Mich.

The feed and livery business of J. W. Anderson at Springfield, Ky., has been bought by W. R. Scott.

A building for handling feed, etc., is to be built at Luana, Iowa, for the Farmers Co-operative Company.

A feed store has been added at Vista, Calif., by F. B. and C. W. Schancks to their chain of retail stores.

A hammer type feed mill has been installed by the Parkersburg Grain & Fuel Company of Parkersburg, Iowa.

A controlling interest in the Haleyville Feed Store at Haleyville, Ala., has been bought by E. G. Herring.

The Quality Feed & Seed Store has been opened at Ionia, Mich., by W. H. Smith and John E. Lake of Nashville.

A new coal and feed shed has been built at Niantic, Ill., for Bruce & Frederick. A new cleaner was also installed.

Equipment and electric motors for grinding feed and ear corn have been installed in the elevator at Bricelyn, Minn.

A branch store has been opened at Alamosa, Colo., by the Sporleder Selling Company to sell grain, feed and groceries.

A seed store has been opened at Clarkson, Neb., by Charles L. Suchan who has bought a building there for the purpose.

The Dunn Feed & Seed Company has opened for business at Lawrenceburg, Tenn., under the direction of James T. Dunn.

Charles MacFarlane has rented the business of Joseph Harvey at Cuba City, Wis., and will handle all kinds of feed and coal.

The wholesale feed and grocery business of the Hammett Grocery Company at Pine Bluff, Ark., has been bought by James Adams.

The Albany Feed Store was recently opened at Albany, Ga., and will handle Purina Feed. Whitfield Gunnels will be in charge.

Improvements have been completed at Hynes, Calif., for the Consumers Feed & Fuel Company which will double the office space.

A feed store has been opened at Waterloo, Ind., by R. C. Fretz in which a full new line and equipment to grind feed will be installed.

A jobbing department has been established by Harry B. Apple, flour and millfeed broker at Columbus, Ohio. Heretofore Mr. Apple has confined his

activities to carlot transactions, but with the new department will be able to do business in small lots.

An addition has been built to the flour and feed warehouse of H. N. Jensen & Sons, Inc., of Estherville, Iowa. The new structure is for baled hay, tankage, etc.

The branch feed store of the Irwin Company at Escondido, Calif., has been discontinued. Its main plant at El Cajon is under the management of C. W. Stafford.

A hammer mill has been installed in the elevator of the Wm. Nading Grain Company at Waldron, Ind. Firm headquarters are at Shelbyville and Greensburg.

A new batch mixer giving the company capacity of 20 tons a day has been installed by the Clinton Grain & Elevator Company of Clinton, Mo. F. G. Booher is manager.

Capitalized at \$10,000, the Weinmann-Raleigh Feed Company has been incorporated at Conway, Ark. J. F. Weinmann, C. B. Raleigh, B. T. Bullion, Sam Frauenthal and Frank Farris are interested in the

FIELD SEEDS

(Continued from Page 571)

jured by frost," says the seed analyst. "The germs of kernels injured by freezing are amber colored, while the germs of good kernels are white. By noting the color of the germ much useless testing may be avoided.

"To prove this for yourself, compare carefully the germs of good kernels with those of bad or frozen kernels. Take a sharp knife and with the kernel of corn held germ side up pare away the covering of the germ for its entire length. The snow-white color of the bright waxy germs of good seed corn will be apparent at once as contrasted with the amber color of germs from frozen kernels.

"This color test is not intended to take the place of the germination test, but is only to save time in selecting the ears to be tested. Neither can the crib selection of seed corn be recommended as a desirable practice. In seasons of seed corn shortage, however, such as the present season, such selection may be necessary.

"It is always best to discard all ears which have discolored or shrunken germs, all moldy ears, and all ears showing kernels with blistered or wrinkled seed coats, since in most cases such ears have been injured by freezing due to too much moisture in the kernel and cob."

The experiment station is offering to test corn for germination free of charge for New York farmers.

ANOTHER SEED COMPANY BROADCASTS

The radio is fast becoming a popular medium of broadcasting information regarding the selection and planting of field and garden seeds. Several seed companies have been mentioned in these columns as broadcasting over their own and leased stations. Now comes the announcement that the

Rudy-Patrick Seed Company of Kansas City, Mo., is to broadcast also. Over station WHB, Howard S. Patrick, president of the company, delivered his initial address on February 10. Red and Sweet Clover, Bluegrass, Timothy, Alfalfa and other seeds are to be subjects of talks by Mr. Patrick during the next few weeks on Thursday nights.

SEED NEWS FROM ABOUT MILWAUKEE

By C. K. TRAFTON

The seed trade at Milwaukee is turning more active daily with the orders pouring in from various sections.

The demand for Red Clover at Milwaukee is very good. The supply of seed is strictly limited according to the local seed houses and the demand is strong. The quality of the seeds offered, however, is excellent. It has been found that the Clover seed has very high germination tests.

The seed corn situation in Wisconsin is more or less quiescent. The farmers are reported to be sleeping on the job and not worrying about seed corn much until the oats and barley planting is out of the way. Seed handlers, however, in immediate touch with the market, say the Wisconsin corn is very scarce, though there is enough of the western corn available to meet all of the expected demands.

The Timothy seed market here is very quiet. From present outlook this is going to be a very dull season in Timothy, the seedsmen say, largely because the state college of agriculture is continually condemning the crop and setting down the farmer who sows Timothy, as a hopeless old fogey.

The demand for Alsike is very keen and prices have soared still more. The supply is pretty well

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Fifth Year

up and the market is holding very firm. Only odd lots here and there available but these do not suffice to meet the strong demand. This seed is jumping into popularity by leaps and bounds and this is believed to be one of the main reasons for the soaring market, although the short supply also contributes to the same end.

The Alfalfa market is quiet as yet. The big demand for this crop does not come along until later in the season and hence business now is more or less on a nominal basis.

The trade in Sweet Clover is active and the demand promises to grow to still larger proportions within two or three weeks. The Sweet Clover has had a decisive boost among the farmers themselves and they are telling each other all over the

state to be sure and raise some Sweet Clover this year. This is being expressed in the Milwaukee seed market.

The White Clover trade is nominal. There is very little trading and in fact many of the leading houses will scarcely hazard a quotation as the market is so quiet.

One of the leading seed handlers of the state started the season with 700,000 pounds of Alfalfa seed, 500,000 pounds of Red Clover seed and 250,000 pounds of Alsike seed. All of the Red Clover and the Alsike seeds were Wisconsin grown. This particular house reports that the biggest factor in the seed market this year is the staining of the foreign grass seeds which has switched the demand of buyers in a single season sharply to the home grown seeds. This concern says the main reason this year for the very high price for seeds is the shutting off of the buying of foreign seeds. Staining of seeds, this concern says, seems to have

had the instantaneous and decisive effect of destroying confidence in the foreign seeds.

This Wisconsin seed man reports an enormous demand for seeds from Iowa, Illinois and Indiana. One single order from a county farm bureau in Iowa was for more than \$13,000 worth of legume seeds. This house reports that it is filling orders from many southern states where farmers are anxious to get the famous northern grown seeds.

At West Salem, Wis., the high school boys have been testing several thousand ears of seed corn. They found that the carefully picked and dried seed corn would show 85 to 100 per cent in germination tests while the corn taken from the corn crib tested mostly around 50 to 75 per cent in germination.

IMPORTS OF FORAGE PLANT SEEDS

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds permitted entry into the United States under the Federal Seed Act:

Kind of Seed	February		July 1, 1926 to Feb. 28, 1927	July 1, 1925 to Feb. 28, 1926
	1927 Pounds	1926 Pounds	Pounds	Pounds
Alfalfa .....(1)	789,900	342,700	*3,286,700	2,224,600
Awnless brome grass				11,000
Canada bluegrass	164,500	31,900	535,700	119,300
Alsike clover	844,200	1,039,700	2,054,500	7,852,700
Crimson clover		211,500	2,385,000	4,901,600
Red clover ....(2)	2,173,900	4,352,200	**7,548,000	14,053,900
White clover	75,600	104,800	738,000	1,219,100
Clover mixtures		6,700	13,100	79,900
Meadow fescue			12,900	13,000
Grass mixtures				100
Foxtail millet				95,400
Orchard grass			260,300	92,900
Rape	117,500	542,800	5,200,300	5,187,200
English ryegrass	59,800	174,600	951,500	2,023,800
Italian ryegrass	55,400	140,100	787,300	1,425,700
Hairy vetch	24,500	218,500	1,372,600	2,740,600
Spring vetch	128,200	132,300	543,500	844,700
Hungarian vetch	65,600		65,600	

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds not subject to the Federal Seed Act:

Kind of Seed	February		July 1, 1926 to Feb. 28, 1927	July 1, 1925 to Feb. 28, 1926
	1927 Pounds	1926 Pounds	Pounds	Pounds
Bentgrass	40,200	15,500	414,200	253,000
Biennial white-flowered sweet clover	687,400	471,700	2,850,500	2,227,200
Biennial yellow-flowered sweet clover	27,300	95,200	132,700	207,000
Canary grass			1,100	
Carpet grass				5,700
Crested dog's tail	3,000	1,900	9,400	32,800
Chewings fescue	17,800		675,000	468,500
Other fescues	18,100	71,300	283,600	985,700
Meadow foxtail				100
Molasses grass				80,500
Lawn grass mixtures			1,000	
Redtop			2,200	
Rhodes grass		4,500		16,500
Rough-stalked meadow grass	14,900	6,300	99,000	63,800
Sweet vernal grass		300	500	700
Tall oat grass	100	100	600	100
Velvet grass		2,300	9,800	8,200
Wood meadow grass	5,300	3,600	16,100	31,800
Yarrow	200		300	

(1) All from Canada. (2) All from France.
*361,700 pounds Alfalfa seed to be permitted entry after staining—not included.
**1,124,700 pounds Red Clover seed to be permitted entry after staining—not included.

DRASTIC SEED BILL IN SOUTH CAROLINA

Under a law recently introduced into the South Carolina legislature, seedsmen would be required to guarantee that 75 per cent of the seed sold was true to type. For violation and conviction the seedsmen would be fined \$500 to \$1,000 or would be required to serve six to 12 months in penal confinement.

After a hearing on the measure, the Legislative

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We specialize on Fine Ground for Poultry Mash.

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WHOLESALE ONLY

Choice Oats FOR SALE

Country run bulk

1925 32 to 35 lb. white oats
1926 30 to 32 lb. white oats

Suitable for

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SEEDS BETTER SEEDS; BETTER CROPS
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CHAPMAN'S RED TOP TANKAGE, MEAT SCRAPS AND BONE MEAL

A Great Specialty Sideline for Elevators

A Highly Palatable Meat, Blood And Bone Tankage

—Moves Quickly—Gets Results for Feeders—Brings Repeat Business
—Leaves the Elevator Man Maximum Profit. Red Top Tankage is produced from the highest grade selected raw materials, by a firm whose guarantee is as good as gold.

50 PER CENT PROTEIN MEAT SCRAPS MAKE HENS PRODUCE MORE EGGS AT LESS COST PER CASE.
FARMERS GET FROM 25 TO 50 CENTS MORE PER BUSHEL FOR CORN BY FEEDING RED TOP TANKAGE TO THEIR HOGS.

RIVERDALE PRODUCTS CO., 208 South La Salle St., Chicago, Ill.



60 Per Cent Protein Guaranteed

March 15, 1927

Committee appointed a sub-committee to draw up a new pure seed bill eliminating the objectional features of the present bill.

INDIANA SEED NEWS

By W. B. CARLETON

Indiana seed dealers report that with the coming of better weather conditions business is looking up quite a bit and they are expecting a good volume of business during the next few months. Farmers are getting ready for their spring work and indications are that the usual crops will be planted this spring and summer.

The serious shortage of Clover seed, which is facing the farmers of Indiana has led the soils and crop department of the Purdue University at Lafayette, Ind., to suggest substitutes for Red and Alsike Clovers that may be used by the Indiana farmers at a considerable saving in the acre seeding cost. Clover seed prices in Indiana are reported the highest in several years and the supply apparently is not sufficient to go around, estimates placing the shortage of seed at 30,000,000 pounds below the normal requirement. Sweet Clover and Alfalfa, seeded in small grain the same as Clover, on the soils and crop farm at Lafayette, have been found to be sure crops, and as Alfalfa seed is no higher than last year and Sweet Clover seed, although higher in price, is still reasonable. Farmers may save considerable by using them as substitutes for Red and Alsike Clover.

T. H. Rickwich has accepted a position with the Ohio Valley Seed Company at Evansville and is traveling in southern Illinois, making the same territory formerly covered by John Greese. E. E. McAtee, another salesman for the Ohio Valley Seed Company, has been covering Kentucky for a number of years and he reports the season a little backward in that state.

The J. A. McCarty Seed Company now is installed in its new home at 230 First Avenue, Evansville, and has ideal quarters and a large force of workers and a large supply of seeds. The new building of the company has plenty of floor space and is conveniently located, joining the company's large seed and feed warehouse. J. A. McCarty, head of the company, formerly was the county agricultural agent of Vanderburgh County.

Many of the county agricultural agents of Indiana are testing out seed corn for the farmers this spring. The county agent of Pike County tested out 6,800 ears last year and expects to double this amount this year.

A reduction of about 3 cents per 100 pounds on grain and seeds was affected in the granting of milling and transit privileges shipped into Evansville by the Illinois Central railroad, the traffic department of the Evansville Chamber of Commerce has been notified.

Corn crops of 10 bushels to the acre will be considered large yields in southern Indiana if the European corn borer finds its way into that district, according to Bert Edmond, president of the Vanderburgh County Bureau at Evansville.

Chester Cox, who for a number of years was connected with the old W. H. Small Seed Company at Evansville, is now located in Los Angeles, Cal., and is doing well.

Growers of sweet corn in Indiana are disturbed by prospect of a lower price and probably smaller acreage this year. Many of the southern Indiana farmers are planning to sow more Alfalfa this year.

Oscar M. Cook, seed and feed dealer at Boonville, is contemplating the enlarging of his warehouse during the coming summer.

It has been announced that Alfalfa seeded on the

(Continued on Page 578)

Miscellaneous Notices

SCALE TICKETS and PRINTING AT LOW PRICES

Howe, Fairbanks or Richardson Registering Scale Tickets, with or without carbon duplicate. Letter Heads, Statements, Envelopes. Anything you want in the printing line.

BENTON REVIEW SHOP, FOWLER, INDIANA

FOR SALE

HOLLYWOOD-TANCRED 300-336 egg blood leghorns, hatching eggs, chicks. Prompt shipment. Satisfaction guaranteed. Catalogue. R. E. SANDY, Box F, Stuarts Draft, Va.

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(Continued from Page 577)

experimental farm of Purdue University at Lafayette, Ind., which has black and clay soil that does not respond profitably to the use of lime, has been successful in 21 seedlings out of 22. Sweet Clover has made no failures in 11 seedlings, but there have been several failures in Red Clover in the same period.

NEW SEED TRADEMARK

The following new seed trademark was published in a recent issue of the *Official Gazette* of the United States Patent Office: "Hy-Test" field seeds and particularly for Timothy and Clover seed.

HY-TEST

Samuel Louis Wolf, doing business as Wolf Seed Company, Fort Wayne, Ind. Filed November 20, 1925. Serial No. 223,614. (Not subject to opposition.)

TRADE "SPOTTY" IN NEW YORK SEEDS MARKET

By C. K. TRAFTON

Running true to form. "Fickle February" was featured by practically all the different varieties of climatic conditions, and it was not astonishing the reports for field and grass seeds were "spotty". For a brief period during which the weather was settled some large distributors reported that demand was much better than normal for the season and that the real spring buying movement was beginning at an unusually early date instead of being unduly delayed as some had feared.

This was by no means general, however. Later

there was an abrupt return of genuine winter conditions, extremely cold weather, heavy snow and sleet, which led to more general reports of slow business. The weather has again become more settled, barring rather low temperatures, and the majority of distributors are once more in a cheerful frame of mind.

Prices generally show no important change when compared with those current a month ago.

Red Clover was an interesting item for a time as far as actual business was concerned and throughout the month was the "head-liner" in the matter of price changes. Although demand slackened later, the upward movement continued as the feeling became more general that domestic Clover would be in more active demand than usual owing to unwillingness of farmers to use the stained foreign seed. The latter factor, coupled with additional fair arrivals—5,700 bags compared with 8,200 in January—resulted in a little more pressure to sell imported seed and it is now quoted at 31 cents in 100 pound lots, or 1 cent lower than a month ago. While some agree that foreign seed may be a slow mover, especially early in the season, they expect that it will be discovered that it is actually superior to the domestic and therefore they predict that ultimately, though possibly not until next year, it will go to a premium over our own product. French shippers were offering at 23 @ 25 cents c.i.f. early in the month, but owing to big stocks and doubt as to its popularity with actual users, buyers showed no interest. A gradual decline followed and latest offers were at 21 cents c.i.f., but importers continued indifferent.

Sweet Clover was offered at lower prices early in the month, resulting in a fairly active trade at 13½ @ 14 cents in 100 pound lots. Compared with the previous nominal quotation of 14½ cents. This resulted in cutting down of stock to a considerable

extent, and although demand fell off appreciably, holders became firmer in their views and are again quoting at the former 14½ cent basis.

White Clover was quiet during the month and is quoted at last month's nominal basis of 32½ in 100 pound lots. The market for forward shipment was wholly nominal. Arrivals were about 540 bags, compared with 350 for the preceding month.

Alsike scored a further advance early in the month, being quoted at 37 @ 38 cents in 100 pound lots, compared with 36½ cents at the time our last report was written. This was owing to a good export inquiry and a growing belief that this variety would be used more freely owing to the high cost of domestic Red Clover and the unpopularity of foreign Clover.

Alfalfa was offered at a slight concession early in the month because of ample stock and a fairly good business resulted at 20 @ 20½ cents in 100 pound lots. As this enabled distributors to move about all that they cared to at those figures, it became more difficult to buy at the inside level, the top price being the generally accepted quotation.

Timothy was held rather more firmly in some quarters early in the month, some quoting 7 cents for 100 pound lots, possibly because of hopes of a better domestic and foreign demand. There was no improvement in either direction, however, and as a consequence the quotation returned again to last month's basis of 6¾ cents. Exports were about 2,550 bags, compared with 5,650 during January.

Redtop was somewhat unsettled early in the month, being quoted at 25 @ 27 cents in 100 pound lots compared with 26 cents previously. Domestic and foreign demand continued slow and at this writing the 26 cents basis is again generally accepted. Exports were only about 200 bags, against about 2,130 in January.

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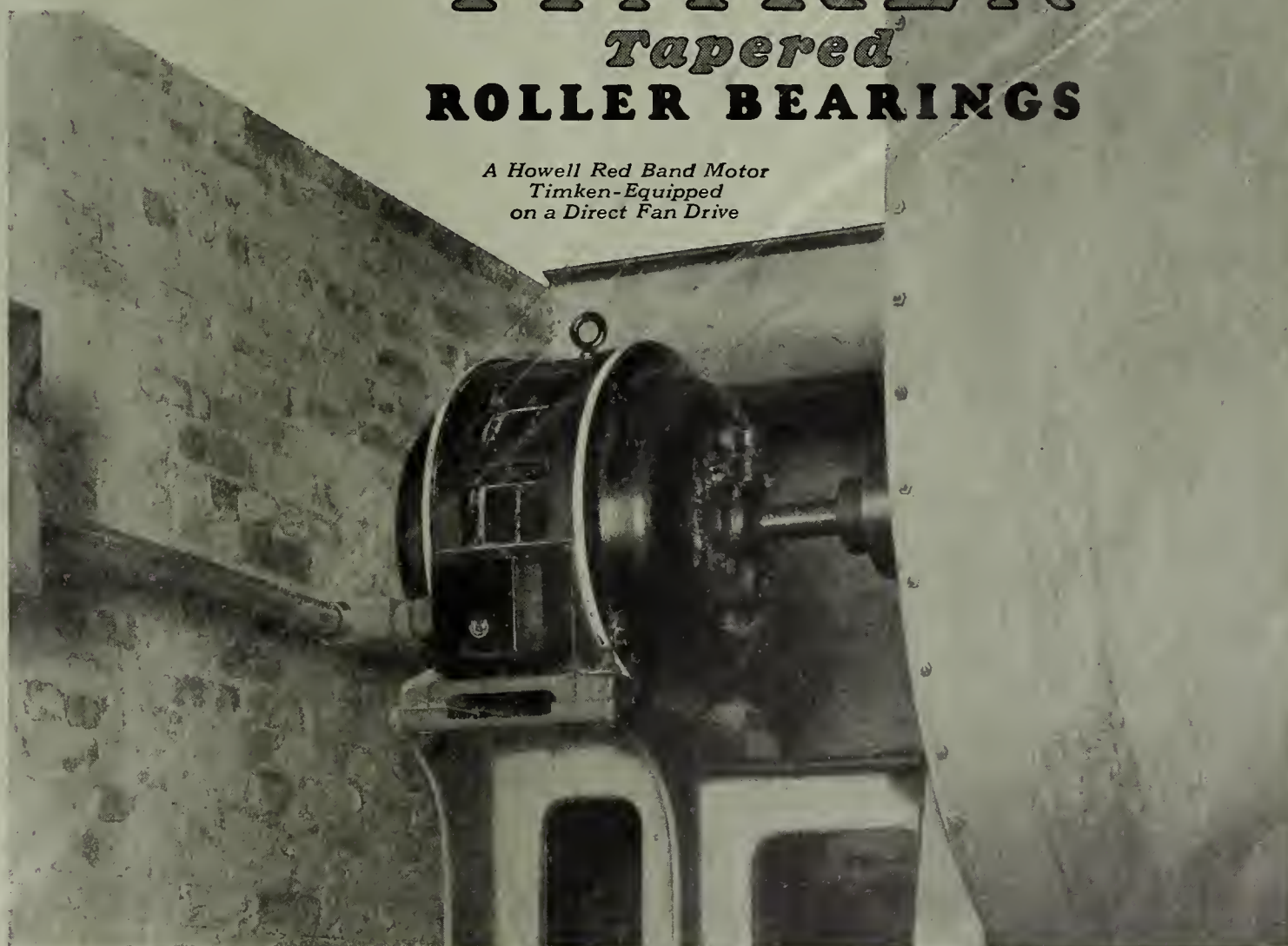
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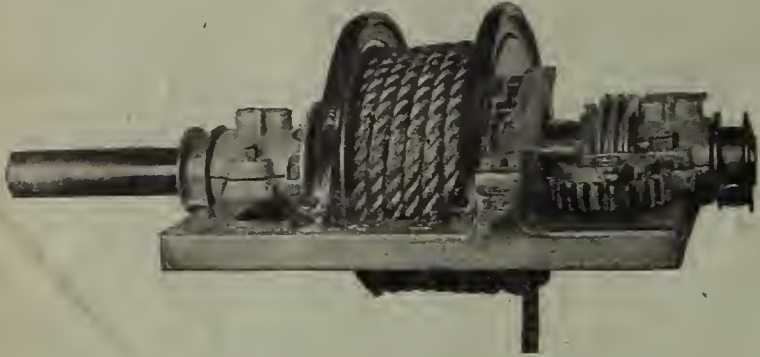
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